Gathering Momentum: Evaluation of a Mobile Learning Initiative

E-Learn 2007

World Conference on E-Learning in Corporate, Government, Healthcare, & Higher Education

Edited by
Theo Bastiaens
Saul Carliner

Proceedings of E-Learn 2007

World Conference on E-Learning in Corporate, Government, Healthcare, & Higher Education

October 15-19, 2007 • Québec City, Québec, Canada

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See AACE Review Policy: http://www.aace.org/reviewpolicy.htm

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Association for the Advancement of Computing in Education

Membership Information • Conferences • Publications

Invitation to Join

The Association for the Advancement of Computing in Education (AACE) is an international, non-profit educational organization. The Association's purpose is to advance the knowledge, theory, and quality of teaching and learning at all levels with information technology.

This purpose is accomplished through the encouragement of scholarly inquiry related to technology in education and the dissemination of research results and their applications through AACE sponsored publications, conferences, and other opportunities for professional growth.

AACE members have the opportunity to participate in topical and regional divisions/societies/chapters, high quality peer-reviewed publications, and conferences.

Join with fellow professionals from around the world to share knowledge and ideas on research, development, and applications in information technology and education. AACE's membership includes researchers, developers, and practitioners in schools, colleges, and universities; administrators, policy decision-makers, professional trainers, adult educators, and other specialists in education, industry, and government with an interest in advancing knowledge and learning with information technology in education.

Membership Benefit Highlights

- *Gain professional recognition by participating in AACE sponsored international conferences*
- *Enhance your knowledge and professional skills through interaction with colleagues from around the world*
- *Learn from colleagues' research and studies by receiving AACE's well-respected journals and books*
- *Receive a subscription to the Professional Member periodical* AACE Journal [electronic]
- *Receive discounts on multiple journal subscriptions, conference registration fees, proceedings books & CD-ROMs*
- *Access the AACE Education & Information Technology Library, a valuable online resource that is fully searchable and covers AACE academic journals and international conference proceedings.*

http://www.aace.org

Celebrating 25+ Years of Service to the Educational Technology Community

AACE Journals

Abstracts for all journal issues are available at **http://www.aace.org/pubs**

AACE Journal – Electronic Journal

AACE JOURNAL
International Forum on Information Technology in Education

AACE's member journal is the focal point to exchange information between disciplines, educational levels, and information technologies. Its purpose is to stimulate the growth of ideas and practical solutions which can contribute toward the improvement of education through information technology.

CITE – Electronic Journal

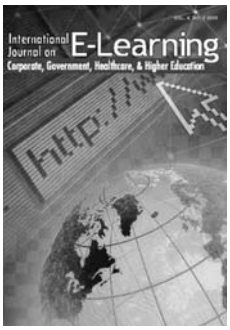
CITE
CONTEMPORARY ISSUES IN TECHNOLOGY & TEACHER EDUCATION

An electronic publication of the Society for Information Technology and Teacher Education (SITE), established as a multimedia, interactive electronic counterpart of the *Journal of Technology and Teacher Education.*

International Journal on E-Learning

(Corporate, Government, Healthcare, & Higher Education)

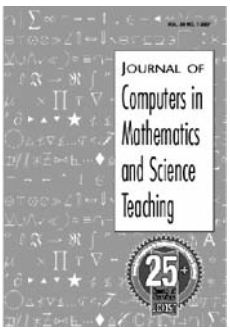
(IJEL) ISSN# 1537-2456 Quarterly



IJEL serves as a forum to facilitate the international exchange of information on the current theory, research, development, and practice of E-Learning in education and training. This journal is designed for researchers, developers and practitioners in schools, colleges, and universities, administrators, policy decision-makers, professional trainers, adult educators, and other specialists in education, industry, and government.

Journal of Computers in Mathematics & Science Teaching

(JCMST) ISSN# 0731-9258 Quarterly



JCMST is the only periodical devoted specifically to using information technology in the teaching of mathematics and science. The *Journal* offers an in-depth forum for the exchange of information in the fields of science, mathematics, and computer science.

Journal of Educational Multimedia & Hypermedia

(JEMH) ISSN# 1055-8896 Quarterly

Designed to provide a multidisciplinary forum to present and discuss research, development and applications of multimedia and hypermedia in education. The main goal of the *Journal* is to contribute to the advancement of the theory and practice of learning and teaching using these powerful and promising technological tools that allow the integration of images, sound, text, and data.

Journal of Interactive Learning Research

(JILR) ISSN# 1093-023X Quarterly

The *Journal's* published papers relate to the underlying theory, design, implementation, effectiveness, and impact on education and training of the following interactive learning environments: authoring systems, CALL, assessment systems, CBT, computer-mediated communications, collaborative learning, distributed learning environments, performance support systems, multimedia systems, simulations and games, intelligent agents on the Internet, intelligent tutoring systems, micro-worlds, and virtual reality-based learning systems.

Journal of Technology and Teacher Education

(JTATE) ISSN# 1059-7069 Quarterly

A forum for the exchange of knowledge about the use of information technology in teacher education. *Journal* content covers preservice and inservice teacher education, graduate programs in areas such as curriculum and instruction, educational administration, staff development, instructional technology, and educational computing.

Education & Information Technology Library – Electronic

Ed/ITLib
EDUCATION & INFORMATION TECHNOLOGY LIBRARY

The EdITLib is your source for peer-reviewed and published articles and papers on the latest research, developments, and applications related to all aspects of Educational Technology and E-Learning. Included are 1,000s of articles from AACE journals and international proceedings.

AACE Conferences

Details for conferences are available at **http://www.aace.org/conf**

The exchange of ideas and experiences is essential to the advancement of the field and the professional growth of AACE members. AACE sponsors conferences each year where members learn about research, developments, and applications in their fields, have an opportunity to participate in papers, panels, poster/demonstrations and workshops, and meet invited speakers.

ED-MEDIA 2008

World Conference on Educational Multimedia, Hypermedia & Telecommunications

JUNE 30-JULY 4 • VIENNA, AUSTRIA

ED-MEDIA - World Conference on Educational Multimedia, Hypermedia & Telecommunications

This annual conference serves as a multidisciplinary forum for the discussion of the latest research, developments, and applications of multimedia, hypermedia, and telecommunications for all levels of education.

E-Learn 2008

World Conference on E-Learning in Corporate, Government, Healthcare, & Higher Education

NOVEMBER 17-21 • LAS VEGAS, NEVADA, USA

E-Learn - World Conference on E-Learning in Corporate, Government, Healthcare, & Higher Education

E-Learn is a respected, international conference enabling E-Learning researchers and practitioners in corporate, government, healthcare, and higher education to exchange information on research, development, and applications.

SITE Society for Information Technology & Teacher Education 2008

19TH INTERNATIONAL CONFERENCE

MARCH 3-7 • LAS VEGAS, NEVADA, USA

SITE - Society for Information Technology and Teacher Education International Conference

This conference, held annually, offers opportunities to share ideas and expertise on all topics related to the use of information technology in teacher education and instruction about information technology for all disciplines in preservice, inservice, and graduate teacher education.

Membership Application

Join today and keep up-to-date on the latest research and applications!

Name: _____

Address: _____

City: _____ State: _____ Code: _____ Country: _____

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Professional Membership $95

AACE Professional Membership includes a subscription to one AACE print Journal (see below), full online access to all back issues of the Journal selected, online subscription to the *AACE Journal* (formerly Educational Technology Review), discount on AACE conference registrations and proceedings, discount subscriptions to additional AACE journals, full access to the Career Center and Job Board, and all the benefits of AACE Membership. Please indicate below the Journal package you wish to receive.

1 Journal	$95	_____	4 Journals	$260	_____
2 Journals	$150	_____	All 5 Journals	$315	_____
3 Journals	$205	_____			

Additional shipping charge of $15 per journal per year for non-U.S. addresses

TOTAL $ _____

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AACE Student Membership* includes a subscription to one AACE print Journal (see below), full online access to all back issues of the Journal selected, online subscription to the *AACE Journal* (formerly Educational Technology Review), discount on AACE conference registrations and proceedings, discount subscriptions to additional AACE journals, full access to the Career Center and Job Board, and all the benefits of AACE Membership. Please indicate below the Journal package you wish to receive.

1 Journal	$55	_____	4 Journals	$160	_____
2 Journals	$85	_____	All 5 Journals	$195	_____
3 Journals	$125	_____			

Additional shipping charge of $15 per journal per year for non-U.S. addresses

TOTAL $ _____

AACE Journals

Check below the journal(s) you wish to receive:

- ❑ *International Journal on E-Learning (IJEL)*
- ❑ *Jrl. of Educational Multimedia and Hypermedia (JEMH)*
- ❑ *Jrl. of Computers in Math and Science Teaching (JCMST)*
- ❑ *Jrl. of Interactive Learning Research (JILR)*
- ❑ *Jrl. of Technology and Teacher Education (JTATE)*

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Best Value

AACE Professional Membership PLUS the EdITLib – Education & Info. Tech. Library (electronic) includes all the benefits mentioned above (except print journal) PLUS unlimited access to fully searchable EdITLib – Education & Info. Tech. Library (electronic). The EdITLib – Education & Info. Tech. Library (electronic) includes thousands of Educational Technology/E-Learning peer-reviewed journal articles, conference papers, and more.

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Student Membership PLUS the EdITLib – Education & Info. Tech. Library (electronic) $95

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AACE Student Membership* PLUS the EdITLib – Education & Info. Tech. Library (electronic) includes all the benefits mentioned above (except print journal) PLUS unlimited access to fully searchable EdITLib – Education & Info. Tech. Library (electronic). The EdITLib – Education & Info. Tech. Library (electronic) includes thousands of Educational Technology/E-Learning peer-reviewed journal articles, conference papers, and more.

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*If you selected a Student Membership rate above, you must be registered full-time in an accredited educational institution and you must provide the following information:

Expected graduation date: _____

Educational Institution: _____

Library/Institutional Subscriptions

- ❑ *Int'l Jrl. on E-Learning (IJEL)* $175
- ❑ *Jrl. of Educational Multimedia and Hypermedia (JEMH)* $175
- ❑ *Jrl. of Computers in Math and Science Teaching (JCMST)* $175
- ❑ *Jrl. of Interactive Learning Research (JILR)* $175
- ❑ *Jrl. of Technology and Teacher Education (JTATE)* $175
- ❑ EdITLib – Education & Info. Tech. Library (electronic) $1275

Additional shipping charge of $15 per journal per year for non-U.S. addresses

TOTAL $ _____

Method of Payment (US Dollars)

Membership extends for 1 year from the approximate date of application. Please allow 6-8 weeks for delivery.

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13TH ANNUAL

CALL FOR PARTICIPATION

E-Learn 2008

World Conference on E-Learning in Corporate, Government, Healthcare, & Higher Education

November 17-21, 2008
Las Vegas, Nevada, USA

Riviera Hotel & Casino Las Vegas

Proposals Due: April 29, 2008 • http://www.aace.org/conf/elearn

- Keynote Speakers
- Invited Panels/Speakers
- Full & Brief Papers
- Panels
- Roundtables
- Best Practices Sessions
- Tutorials & Workshops
- Research/Technical Showcases
- Products/Services Showcases
- Products/Services Presentations
- Symposia

Proposals due: April 29, 2008
Authors notified: May 30, 2008
Proceedings file deadline: Sept. 24, 2008
Early registration deadline: Sept. 24, 2008
Advance registration deadline: Nov. 3, 2008

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International Journal on E-Learning
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INVITATION

E-Learn 2008 – World Conference on E-Learning in Corporate, Government, Healthcare, & Higher Education is an international conference organized by the Association for the Advancement of Computing in Education (AACE) and co-sponsored by the International Journal on E-Learning. This annual conference serves as a multi-disciplinary forum for the exchange of information on research, development, and applications of all topics related to e-Learning in the Corporate, Government, Healthcare, and Higher Education sectors. We invite you to attend E-Learn 2008 and submit proposals for papers, panels, best practices, roundtables, tutorials, workshops, posters/demonstrations, and corporate showcases/demos. The Conference Review Policy requires that each proposal will be peer- reviewed by three reviewers for inclusion in the conference program, proceedings book, and CD-ROM proceedings.

Information for Presenters

Details of presentation formats are given on the following pages. The general principles applying to all are:

- All communication will be with the principal presenter who is responsible for communicating with co-presenters of that session.
- The conference will attempt to secure all equipment for presenters, with the exception of poster/demonstration presenters. However, where special equipment is needed, presenters may need to bring or rent equipment. The name of a rental firm can be provided.
- All presenters must register and pay the registration fee. Early registration fee will be approximately $425 (US) with a discount for AACE members.

Proceedings

Accepted papers will be published in the proceedings book, abstracts book, and CD-ROM. These publications will serve as major sources of information for the e-Learning community, indicating the current state of the art, new trends and new opportunities.

Paper Awards

All presented papers will be considered by the Program Committee for Outstanding Paper Awards. There will also be an award for Outstanding Student Paper (therefore, please indicate with your submission if the primary author is a full-time student). Award winning papers will be highlighted in the AACE online periodical the AACE Journal. See previous award papers featured in the online Education & Information Technology Library.

Hotel & Travel Arrangements

Special hotel room rates will be available to conference attendees. Discount airfares will be available from a designated airline carrier.

Background

The E-Learn Conference series originated as the WebNet World Conference on the WWW and Internet which was held as a major international conference in San Francisco, CA (1996); Toronto, Canada (1997); Orlando, Florida (1998); Honolulu, HI (1999); San Antonio, TX (2000); Orlando, FL (2001); Montréal, Canada (2002); Phoenix, AZ (2003); Washington DC (2004); Vancouver BC, Canada (2005); Honolulu, HI (2006) and Quebec City, Canada (2007). E-Learn 2008 is the thirteenth in this series of internationally respected events.

Corporate Participation

A variety of opportunities are available to present research-oriented papers or to showcase and market your products and services.

E-Learn is Unique

The E-Learn Conference series is an international forum designed to facilitate the exchange of information and ideas on the research, issues, developments, and applications of a broad range of E-Learning topics.

E-Learn is an innovative collaboration between E-Learning researchers and practitioners from the corporate, government, healthcare, and higher education sectors. All presentation proposals are reviewed and selected by a respected international Program Committee, based on merit and the perceived value for attendees.

Broad Range of Important Topics: Coverage of a wide range of interrelated topics is just one of the features that distinguishes the E-Learn conference series. Attendees are able to mix and match sessions to focus on the combination of topics that are of the most interest, concern and benefit to them.

Participatory Event: While there are Keynote and Invited talks delivered by internationally recognized technology experts, E-Learn is more of a participatory event. This means that all attendees play an important, interactive role, offering valuable feedback and insight gained from their own experiences. The atmosphere at E-Learn is exciting and energizing. A wealth of knowledge is gathered and exchanged, as professionals from disparate but related fields come from all over the world to meet one-on-one or in small groups and learn about new developments that impact their respective activities.

Not a Trade Show: While E-Learn does encourage commercial participation, it is not a trade show, and there is not an exhibition. Instead, the conference uniquely relates and displays commercial activities throughout the E-Learn program in the form of Products/Services Showcase and other presentations by companies.

TOPICS

The scope of the conference includes, but is not limited to, the following topics as they relate to e-Learning in Corporate, Government, Healthcare, and Higher Education.

Sectors or Application Domains

- General & Cross-Domain
- Corporate
- Government
- Health Care
- Higher Education
- Informal Learning (Communities, Homes)
- K-12
- Libraries and Museums
- Military
- Professional Associations & Non-Profits

Major Topics relating to or technologically supporting E-Learning

- Content Development
- Evaluation
- Implementation Examples and Issues
- Instructional Design
- Policy Issues
- Research
- Social and Cultural Issues
- Standards and Interoperability
- Tools and Systems
- Other

Specific Topics Examples

- Accessibility
- Asynchronous Learning
- Authoring Tools
- Building E-Learning Architectures
- Collaborative Learning
- Community Building
- Courseware Development
- Customer Training
- Developing an Organizational E-Learning Strategy
- Developing, Integrating, and Delivering E-Learning Solutions
- Digital Libraries for E-Learning
- Distance Learning
- Electronic Publishing Tools for E-Learning
- Evaluation/Performance Measurement & Assessment
- Good Practice Concepts & Examples
- Human-Computer Interaction
- Industry-University Partnering
- Infrastructure of E-Learning Environments
- Innovative Curriculum in E-Learning
- Instructional Design for E-Learning
- Intelligent E-Learning Technology
- Interactive E-Learning Systems
- Knowledge Management in E-Learning
- Learning & Content Management Systems
- Management of Learning Resources
- Marketing/Promoting Learning Activities
- Multimedia-based E-Learning Systems
- Organizational E-Learning Strategies
- Pedagogical & Issues
- Policy and Law
- Quality Management and Assessment in E-Learning
- Research Perspectives for E-Learning
- Simulations
- Societal Issues, Including Legal, Standards, & International Issues
- Virtual Universities, Classrooms, and Laboratories

SUBMISSION INFORMATION

FULL PAPERS

Presentation time: 25 minutes
Proposal submission length: 4-8 pages (2500-4950 words); an abstract is not sufficient to be evaluated as a Full Paper.
Proceedings length: 8 pages maximum
AV equipment provided: PC, Projector, Internet, VCR

Papers present reports of significant work or integrative reviews in research, development, applications, and societal issues related to all aspects of the conference topics.

BRIEF PAPERS

Presentation time: 15 minutes
Proposal submission length: 2-6 pages (1,250-3,750 words)
Proceedings length: 6 pages maximum
AV equipment provided: PC, Projector, Internet, VCR

These papers are brief, more condensed presentations or work-in-progress projects. The submission should indicate:

- What is going to be shown or demonstrated or offered;
- The major aspects;
- The context or motivation; and
- Relevant URLs or literature references.

BEST PRACTICES SESSIONS

Presentation time: 20 minutes
Proposal submission length: 1-2 paragraphs
Proceedings length: 6 pages (for proceedings) or 150 words (to be published only in Abstract Book)
AV equipment provided: PC, Projector, Internet

Best Practices sessions presenters discuss and demonstrate their organization's online learning strategies, techniques, issues, solutions, and courseware. This is an opportunity to Inform attendees about the lessons learned and future plans from those who have designed, developed, and implemented online learning.

ROUNDTABLES

Presentation time: 1 hour
Proposal submission length: 2-6 pages (1,250-3,750 words)
Proceedings length: 6 pages maximum
AV equipment provided: electricity

These sessions allow maximum interaction in informal, small-group discussions on a single topic. The format is appropriate for papers, projects, or work-in-progress that encourage discussion. Roundtables share a room with 2-3 other concurrently held Roundtables.

PANELS

Presentation time: 1 hour
Proposal submission length: 2-6 pages (1,250-3,750 words)
Proceedings length: 6 pages maximum for each paper
AV equipment provided: PC, Projector, Internet, VCR

A Panel, consisting of 3-5 people (including the chair), present their views on a common theme, issue, or question, and then to discusses them with the audience.

The Panel must present an opportunity for the audience to hear well reasoned arguments and discussions about pertinent topics as seen from a variety of viewpoints. For example, 'on-line testing' could be a Panel discussion with panelists presenting arguments in support of, and in opposition to, testing.

Panels must include the audience. Thus, the panelists should take no more than 30, of the total 60 minutes, to make their case and then guide the audience through a discussion and series of questions and answers. In an effort to present differing viewpoints, it is a requirement that panelists can NOT all represent the same institution, research project, or association.

Panel selection will be based on the importance, originality, focus and timeliness of the topic; expertise of proposed panelists; as well as the potential for informative AND controversial discussion.

Panels must allot at least 50% of the time for interaction and discussion with the audience.

The Panel leader should provide an abstract describing the panel and a submission file with the following sections that describe the panel:

1) introduction that links the theme to the literature and its significance for the field of information technology and teacher education, around 150 word abstracts of each panelists' perspective,
2) list of panelists' perspective titles and authors, with their organizations, and countries in the order they will be presented, and
3) outline of how the panel will be organized. After acceptance, the Panel coordinator will be given the option to invite Panel authors to submit their papers to a specific website. Until then, authors should NOT submit their individual papers for the Panel. Contributing authors may choose to publish their papers in the Proceedings as a Full or Brief Paper. The Panel abstract will only appear in the conference Abstract book.

TUTORIALS / WORKSHOPS

Presentation time: 3.5 or 7 hours
Proposal submission length: see information below
Proceedings length: no pages
AV equipment provided: Instructor PC, Projector, Internet

Tutorials and Workshops are intended to enhance the skills and broaden the perspective of their attendees. They should be designed to introduce a rigorous framework for learning a new area or to provide advanced technical training in an area. Submissions will be selected on the basis of the instructors' qualifications for teaching the proposed Tutorial or Workshop and their contribution to the overall conference program. Workshops differ from Tutorials by involving hands-on experience with hardware/software provided.

Note: Due to the extra expense required to provide Workshop (hands-on) equipment, only Workshops for which instructors provide their own participant equipment will be accepted. Please state in your proposal what equipment you will bring.

Tutorial/Workshop proposals must include:

- Clear description of the objectives;
- Intended audience (experience level and prerequisites);
- Proposed length (3.5 hours or 7 hours);
- 200-word abstract;
- 1-page topical outline of the content; and
- Summary of the instructor's qualifications.

SUBMISSION INFORMATION

RESEARCH/TECHNICAL SHOWCASES

Presentation time: 2 hours
Proposal submission length: 2-6 pages (1250-3750 words)
Proceedings length: 6 pages
AV equipment provided: 4'x8' poster board, 6' table, 2 chairs, electricity, Internet, if wireless card & PC if provided by presenter

Research/Technical Showcases enable researchers and developers to demonstrate and discuss their latest results and developments in progress in order to gain feedback and to establish contact with similar projects.

These proposals must include:

- Description of the planned Showcase; should emphasize the problem, what was done, and why the work is important

Research/Technical Showcases presenters will be required to arrange for their own systems software and hardware.

PRODUCTS/SERVICES SHOWCASES

Presentation time: 2 hours
Proposal submission length: 2-6 pages (1250-3750 words)
Proceedings length: 6 pages
AV equipment provided: 4'x8' poster board, 6' table, 2 chairs, electricity, Internet, if wireless card & PC if provided by presenter

Demonstrate and discuss your company's products, services, developments, applications and research, inform the audience of your future directions, gain feedback, and establish contacts.

Scheduled with Research/Technical Showcases grouped together in open exhibition-style, usually all in one hall. This is an informal event with a circulating conference-wide audience. Sales are permitted You may stock and sell your product at your table.

PRODUCTS/SERVICES PRESENTATIONS

Presentation time: 30 minutes
Proposal submission length: 1-2 paragraphs
Proceedings length: 150 words (to be published only in Abstract Book)
AV equipment provided: PC, Projector, Internet

Demonstrate and discuss your organization's products, services, developments, applications and research, inform the audience of your future directions, gain feedback, and establish contacts.

Scheduled concurrently only with other Product/Services Presentations; Presentation rooms generally accommodate 50-150 people, theatre-style. This is more of a formal presentation than the Products/Services Showcase.

SYMPOSIA

Presentation time: 2 hours
Proposal submission length: 2-6 pages (1,250-3,750 words)
Proceedings length: 6 pages maximum for each paper
AV equipment provided: PC, Projector, Internet, VCR

A Symposium is a collection of Full and/or Brief Papers on a theme that has been coordinated and led by the symposium's leader(s). Each Symposium that is accepted will be allocated two adjacent hour-long slots in the conference program.

The Symposium leader should provide an abstract briefly describing the symposium and a submission file with the following sections:

1) introduction that links the theme to the literature and its significance for the field of information technology and teacher education, around 150 word abstracts of each paper,
2) list of paper titles and authors, with their organizations, and countries in the order they will be presented and indicating which will be presented the first and second hours, and
3) outline of how the symposium will be organized.

After acceptance, the Symposium coordinator will be asked to invite Symposium authors to submit their papers to a specific website. Until then, authors should NOT submit their individual papers for the Symposium.

Contributing authors may choose to publish their papers in the Proceedings as a Full or Brief Paper. The Symposium abstract will only appear in the conference Abstracts book.

SUBMISSION REQUIREMENTS

Submit all proposals by completing the Web form at:
http://www.aace.org/conf/elearn/submitguide.htm

All proposals must be submitted by uploading Word or RTF file using the Web form.
No hard copy paper, faxed, or e-mail submissions will be accepted. Please send your proposal only ONE time.

Questions? Contact AACE at: Phone: 757-366-5606 • Fax: 703-997-8760 • E-mail: conf@aace.org

Las Vegas

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For further Las Vegas information see:
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Las Vegas, an ever-changing fantasy-land of a city, has seen unbelievable expansion since it emerged from the desert 100 years ago. Las Vegas continues to build upon its reputation as a vibrant showcase for the extraordinary. This is the city that attracts more than 38 million visitors a year by offering the grandest hotels, the biggest stars in entertainment, the highest caliber of award-winning chefs and master sommeliers, and, of course, the brightest lights.

Las Vegas offers unmatched entertainment. Some of the many headliners include Celine Dion (Caesars Palace), Barry Manilow (Las Vegas Hilton) and Toni Braxton (Flamingo Las Vegas). Broadway hits such as "MAMMA MIA!" (Mandalay Bay), "Phantom - The Las Vegas Spectacular" (Venetian) and "The Producers" (Paris Las Vegas) are amongst visitor favorites. World-class productions are also available and include Cirque du Soleil's newest shows, "KÁ" (MGM Grand) and "LOVE" (The Mirage).

While planning an evening of entertainment, look to the growing roster of gourmet restaurants and unparalleled wine and food adventures in Las Vegas. A host of fine dining and lifestyle magazines - including Bon Appetit, Wine Spectator, Gourmet, Robb Report and Esquire - have honored the city for its fantastic fare and hailed individual restaurants for their exquisite cuisine, created by the likes of Bradley Ogden, Hubert Keller, Alain Ducasse, Emeril Lagasse, and Wolfgang Puck. To accompany its growing list of world-class chefs, Las Vegas has attracted more master sommeliers than any other U.S. city.

The city famous for having "something for everyone" furthers the proof to its claim when the sun goes down. After dinner, you can experience a variety of night spots with personalities as varied as their own.

A shoppers paradise. Drawing an influx of designers and upscale specialty boutiques, Las Vegas has become one of the premium world-class shopping destinations in the country. Headliners such as Harry Winston, Manolo Blahnik, Juicy Couture, Jimmy Choo, and Dolce and Gabbana now populate the Strip at the Fashion Show, Forum Shops at Caesars, Mandalay Place, Desert Passage, Grand Canal Shoppes, Via Bellagio and the shops at Wynn Las Vegas.

Whether you are dancing under the lights of the Fremont Street Experience in Downtown Las Vegas or strolling the shops at Monte Lago Village at Lake Las Vegas, you are never far from a golf course. The sixty-plus golf courses in Las Vegas, designed by the likes of Jack Nicklaus, Pete Dye, Tom Weiskopf and Robert Trent Jones Jr., have put Vegas on the map for golf connoisseurs. Each course is within a one-hour radius of the city, offering challenging play and beautiful desertscapes, flowing waterfalls, rolling greens and mountain views.

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"The E-Learn conference series is about Blending. It is about a coming together or blending of ideas and experiences of the world's leading researchers, developers, and practitioners from education, government, healthcare and business o all learn from and inform one another. Too often similar groups only associate with each other and, thus, continually exchange similar ideas.

The underlying concept for E-Learn is based on the insight that opportunities to produce great work and achievements are often found at the margins of our individual knowledge. And by providing a forum, such as E-Learn, that exposes us each year to diverse groups of remarkable people, the intersection of ideas and knowledge should present possibilities for personal learning and growth, hopefully with the global goal of creating and improving online learning."

Gary H. Marks, Ph.D.
AACE Executive Director

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Authors notified: Nov. 21, 2007
Proceedings file deadline: Jan. 21, 2008
Early registration deadline: Jan. 21, 2008

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Preface

Bienvenue—welcome to E-Learn 2007 in Quebec, Canada, hosted by the Association for the Advancement of Computing in Education (AACE), http://www.aace.org/

This conference provides a unique forum for Government, Healthcare, Education, and Business professionals to discuss the latest research, development, applications, issues, and strategies, to explore new technologies, and to identify solutions for today's challenges related to online learning. This year, 1500+ papers were submitted, of which approximately 45% were accepted.

Collectively these papers tell a broader story about the current state of e-learning. Like our host city—one of the oldest in North America and planning to celebrate its 400th anniversary in the coming year—e-learning is reaching new milestones in its maturity (although the first computer-based training courses only appeared about 40 years ago). With maturity, certain questions are answered.

For example, the questions about whether people can learn from e-learning (yes) and is it as effective as classroom learning (also yes) seem to have been resolved. Other challenges are resolved. When e-learning first appeared, neither computers nor the software for e-learning were affordable to anyone but the wealthiest of organizations. But with low-cost hardware and open source software (some of it designed specifically for e-learning),

The discussion now moves onto new topics, one of the most central being the quality of e-learning. More than one researcher has observed that e-learning often disappoints people. Learners tire of using it. They become bored. Many prefer to switch back to traditional learning approaches. Satisfying e-learners with the experience of e-learning—in addition to the content—is an increasing concern. Some designers favor certain types of designs, from learning philosophies like constructivism to design approaches like games and simulations. But do they really work?

With time also comes experience. The first e-learning designers had no examples to follow and, the designers at the first phase of the current boom in e-learning (which began about a decade ago) had few. Now, e-learning specialists not only have specific samples to guide them, but can be guided by the lessons to be learned from the experiences of designing, developing, and deploying those courses. What are those lessons?

To answer these and similar questions, then, another emphasis in e-learning today is collecting empirical evidence to guide future decisions. The evidence is intended to identify the preconditions for the successful and effective application of technology and designs for learning, and related characteristics. But collecting credible empirical evidence raises issues such as the appropriateness of the choice of research situation and

subjects, the validity of the data gathering, the quality of instruments and the generalizability and transferability of outcomes.

Although the field of e-learning is maturing, it's also still evolving. New technologies, like Second Life, social bookmarking, and social computing, have arrived and, as they have done with earlier technologies, e-learning specialists experiment with the instructdional uses of these newer technologies.

During this conference, we hope that each of you will learn a lot from one another on these and similar topics. The conference brings together a diverse group of people—diverse not only in geography (with participants from the North America and Europe, among other continents), but also in role (academic researcher, instructional designers, and educational programmers, among others), and focus (some of us focus on primary and secondary education, others on higher (tertiary) education), others on the corporate and government environments, and others on informal learning environments like museums) and educational background (some of us are formally trained in education, others in computers, and others in disciplines that are not named here). We encourage you to discuss—and hope that, in many cases, those discussions lead to long-term working relationships and collaborations.

We hope that you will enjoy the conference, enjoy of course the beautiful, historic city of Quebec and the togetherness with all your colleagues from around the world.

We, as Co-Chairs, would like to thank the AACE staff and the volunteers on the E-Learn committees for having worked so hard to create this year's conference and have it work so well. We look forward to seeing you again next year at the E-Learn 2008 in Las Vegas, November 17-21.

Theo J. Bastiaens
Fernuniversität in Hagen, Germany
Open University of the Netherlands, Netherlands

Saul Carliner
Concordia University
Montreal, Canada

Semantically Integrated Interoperability Agent

Azween Abdullah, Dicky Ekklesia, University Technology Petronas, Malaysia

Many researches have been done and still under progressed to fulfill the needs of collaboration between e-learning. This paper describes an on going effort to investigate problems and approaches for making an e-learning interoperability agent (eIA). eIA works as facilitator to mediate intercommunication between e-learning systems. There are 2 basic functions of eIA: searching – corresponding and searching – sharing. Our approach proposes standard interoperability agent based on semantic integration by defining standard web services method as the communication gateway and standard semantic scheme as the data integrator. The proposed model is validated through an implemented prototype as moodle extension.

Learning Attributes Essential for Online Success: An Instrument for Assessing and Supporting Students

Natalie Abell, Cheng-Yuan 'Corey' Lee, Melissa Cain, Heather Wulff, The University of Findlay, USA

This Best Practice presentation is the second phase of a research study investigating the learning attributes of online students. Phase 1 results, presented at E-Learn 2006, identified and verified the factors important for online success. Phase 2 of this research included providing individualized learning tips to online students. The learning tips were gathered from the research literature and from the authors' work with graduate students. An online system was created to survey students and provide them with a customized spectrum of learning tips suited to their particular online learning preferences and needs. At the conclusion of the semester, a survey was administered to measure student perception of the usefulness of the learning tips and their satisfaction level with the online learning. This Best Practice presentation will share Phase 2 results.

A New Model for IT Professional Development

Ken Abernethy, Furman University, USA

In this paper, a new model for post-graduate IT professional development is described. The model is based on the premise that achieving strategic advantage through the use of IT in today's business context requires innovations in the use of technology to support and enhance a company's underlying business model. The ability to do this depends not only on technical skills, but on business knowledge and the skills to creatively combine various technologies to design novel problem solutions as well. The program described has evolved through a university/corporate partnership, resulting in a curriculum reflecting a unique blend of academic and corporate expertise.

Using Web Based Conferencing and Presentation Software to Improve Teaching Effectiveness and the Learning Environment

Jacques Abourbih, Richard Witham, NOSM, Canada

The presentation will illustrate three examples of the use of presentation and web conferencing software to encourage student self assessment. This anonymous assessment data can be used by students to evaluate their understanding of the presented material, or can provide vital information to instructors allowing them to modify presentation delivery or review incompletely understood concepts. The first example demonstrates the use of presentation software to create anonymous self assessment questionnaires that are inserted every 10 to 15 slides throughout a distributed didactic lecture. The second example illustrates the use of student polling by an instructor to immediately assess student understanding of the previously presented material. The third example discusses the use of a branching case scenario to encourage the use of problem solving skills.

Encouraging Self-Regulated Learning Through Electronic Portfolios

Philip C. Abrami, Anne Wade, Vanitha Pillay, Ofra Aslan, Centre for the Study of Learning and Performance, Canada; Eva M. Bures, Centre for the Study of Learning and Performance, Canada; Caitlin Bentley, Centre for the Study of Learning and Performance, Canada

At the Centre for the Study of Learning and Performance (CSLP) and with our partners from LEARN-Quebec, we have developed Electronic Portfolio Encouraging Active Reflective Learning Software (ePEARL) to promote student self-regulation and enhance student core competencies. We wish to: disseminate the tool without charge to policy-makers, educators, students, and parents; encourage its active and sustained use on a wide scale; and learn about effectiveness, sustainability and scalability as we do. This paper summarizes the literature on electronic portfolios (EPs), describes ePEARL, and documents our findings to date including analyses of teacher and student reactions.

Course Creation and Faculty Training for Online Delivery

Chadia Abras, Goucher College, USA

Training faculty to teach online is paramount for the success of any Distance Learning Program. In this paper the author will present best practices in faculty training and course design in the Distance Learning Programs at Goucher College. The practices are drawn from the author's own research and from the Quality Matters Guidelines. The vision for training faculty is discussed and the process of course design is introduced. Earlier practices and why they were introduced are evaluated and a reason for the change in model is highlighted.

Information and Communication Technologies as Educational Research Participants

Catherine Adams, Terrie-Lynn Thompson, University of Alberta, Canada

In this paper, we explore the inclusion of information and communication technologies (ICTs) as key research participants when investigating 21st century learning environments. We ask: how do we bring to inquiry the high-technology artefacts supporting and reforming today's teaching and learning practices, pedagogical relations with students, and ways of interpreting and inscribing the world? How might we begin to "trace the contingent simultaneity of intentions, decisions, affordances, interpretations, uses, codes, programmes…to reveal the nexus that co-constitutes the ethico-political site of technology" (Introna, 2006)? Drawing on insights from Actor-Network-Theory (ANT) and hermeneutic phenomenology, we

describe a set of methodological heuristics to assist in "interviewing" ICTs, tracing and disclosing our educational involvements with these high-technology things.

Exploiting Social Networks to Teach the Art of Critique

Markam Keith Adams, Rowan University, USA

Online social networks are ubiquitous phenomena. This paper presents one educator's efforts to refine his student's skills in talking and writing about art through the integration of online social networks. Traditional art and photography courses use digital media primarily for production purposes. The integration of online social networks presents a unique opportunity for art faculty to incorporate existing technology that students are very familiar with and expand the boundaries of the traditional critique to a venue that students are more comfortable talking and writing in.

Effect of Computer Aided Instruction (CAI) on Students' Attitude to the Teaching and Learning of Agricultural Engineering Courses at National Certificate of Education (NCE) level

Olufemi Adedeji, Adeyemi College of Education, Nigeria

Computer Aided Instruction (CAI) in the teaching and learning process at the National Certificate of Education (NCE) level is in the process of being fully introduced at the College of Education, Ondo State, Nigeria. Agricultural Science Students' performance in Agricultural Engineering Courses (AEC) at NCE level has not been encouraging. Now the question is: Will the introduction of CAI have a positive effect on the attitude and performance of Agricultural Science Students (ASS) in AEC at NCE level? Eighteen final year students who have received instructions and got examined in AEC were made to respond to a 30 - item questionnaire. The responses were numerically quantified, tabulated and analyzed using the Likert Scale. The analysis showed that the students showed a stronger positive attitude for interest in CAI than for AEC.

Academic Libraries As Fulcrum Of E-Learning: Examing the Platform of Selected Institutions In Nigeria

Aderonke Olufunke Adeyemi, Centre for Learning Resources (University Library), Nigeria

Assessing Teacher's Acceptance of Handheld Computers in Classroom Data Collection

Tufan Adiguzel, Ronald Zellner, Victor Willson, Texas A&M University, USA

As governments have invested generously for integration of new technologies into education, the teacher's role for using such technologies in the classroom becomes more prominent. However, relevant prior research suggests that teachers' resistance to new technologies is still high. This study explores teachers' acceptance of handheld computer use, and identifies key intention determinants of using this technology. The study also presents the results of special education teachers' perceptions of using handheld computers in their classrooms.

Supporting the diversity of the E-learning 2.0 learners: The development of a psychological student model

Asli Adisen, Trevor Barker, University of Hertfordshire, UK

This paper describes the development of a psychological student model based on the visual and verbal skills of learners. These skills are important factors of the learners' mental models that are employed when interacting with complex computer applications, such as the ones involved in E-Learning 2.0. In order to develop such a student model, it was important to identify a range of verbal and visual skills that are likely to be required in learning. In a laboratory based study with 50 learners, using software developed for the purpose, learners' performances on those skills were compared against their scores on the Wholist-Analytic (WA) and Verbaliser-Imager (VI) dimensions of Riding's Cognitive Styles Analysis (CSA). Findings of the study indicate that VI dimension of Riding's CSA was not a useful measure of the visual and verbal skills required to interact with complex computer applications. A factor analysis conducted on the data gathered from the visual and verbal skills test was able to identify important components of the necessary skills for inclusion in the student model.

Factors Influencing E-learning Acceptance: A Case Study of Indonesian Open Learning University

Umar Aditiwarman, Ramlah Hussein, KICT-IIUM, Malaysia

The advantages offered by e-learning have been identified by distance learning institutions and educators as one of the emerging tools to improve the quality of learning. This study attempted to investigate factors that were believed to affect student acceptance of e-learning in Indonesian Open Learning University. The factors identified were computer self-efficacy, technological factors, instructional design and instructor characteristics, that were examined to predict their contribution to Technology Acceptance Model (TAM), the model adopted in the study. The findings suggest several implications and contributions to the e-learning body of knowledge and concepts. The result provides interesting insights where Instructional Design and Technological Factors were shown to be predictors of both Perceived ease of Use and Perceived Usefulness. Consistent with previous studies, Computer Self-efficacy and Instructor Characteristics appeared to be predictors of Perceived Usefulness.

The Effects of Using Different Types of Multimedia Presentations on Thai Seventh-grade Learners' Understanding of a Social Studies Text

Rosarin Adulseranee, Prof. James Lockard, Northern Illinois University, USA

The purpose of this study was to investigate and compare Thai seventh graders' comprehension of a social studies text under four different multimedia presentation formats – a written text (W), a written text with graphics (WG), an audio text with graphics (AG), and a written text with audio and graphics (WAG). Findings indicated that the W group scored higher than the other groups on an immediate posttest. However, the WAG and WG groups outperformed all others on a delayed posttest. This adds to previous research that shows multimedia may help students recall information better over time. Multimedia benefits not only US college students, the focus of most prior research, but also younger students and in a different culture. Additional findings confirm that time to complete the learning task depends on the cognitive load and that low-prior-knowledge students learn more effectively with multimedia.

E-learning Effectiveness and Culture

Hafid Agourram, Bishop's university, Lennoxville (Quebec), Canada; Mourad Mansour, King Fahd University of Petroleum and Minerals, Saudi Arabia

Adaptive Approach for the Integration of Homogeneous Teams

Gabriela Aguilar, Cinvestav Unidad Monterrey, Mexico; Kenji Kaijiri, Shinshu University, Japan

SPEBC (Sistema Personalizado de Evaluación Basada en Computadora), an adaptive computer-based assessment system will generate personalized assignments adapted to the learner's, knowledge, group and team's characteristics. The present paper proposes the team personalization, which has its basis on the need of dialog among students. This dialogic activity is considered fundamental to construct meanings in science classroom. The team adaptation will be done grouping students with similar characteristics based on their understanding levels. The team personalization will allow teachers to promote the discussion of the students' ideas in order to improve the learners' compression of a given topic.

A Needs-Analysis Based Evaluation of High school Teachers and Board of Education Staffs Familiarity with "IT" in Isfahan during the Academic Year 2005-2006

Gholamreza Ahmadi, Islamic Azad University(khorasgan branch), Iran (Islamic Republic Of)

The needs analysis covers such different categories as computer, information networks, electronic government and computer tools.The objective was to measure the extent to which high school principals and board of Education staff in Isfahan are familiar with IT and /or the need to increase their IT literacy.Isfahan Board of Education staffs' knowledge of IT is more than that of high school principals concerning information networks, e-government and computer tools. In addition, the results indicated that the knowledge of subjects on computer was at a peak, while their knowledge about the influence of computer tools was quite low.

A study of the rate of (ICT) in – service Education effectiveness among high-school teachers

Gholamreza Ahmadi, Islamic Azad University(khorasgan branch), Iran (Islamic Republic Of)

The present study aims at investigating the extent to which in- service training of information and communication technology (ICT) influences high school teachers . To achieve this end , five different but complementary axes were considered ; namely , improvement of the teaching / learning process , electronic government learning , the use of internet and effective handling of the computer . The findings revealed that the efficacy of in – service training of information and communication technology was below the average at 0.05 confidence level . Accordingly , they regarded the impact of in – service training of Information and communication technology (ICT) on the teaching / learning process to be more than the other axes , but it was said to be the least influential for the electronic government axis .

Grameenogram: Aggregating Digital Resources for Micro Credit Workers Engaged in Capacity Building

Shakib Ahsan, Alannah Fitzgerald, Concordia University, Bangladesh

Grameenogram is an e-learning project designed to train NGO micro credit workers who share a vested interest in capacity building strategies, especially in sectors where expert knowledge is not always readily available. Many NGO workers receive little in the way of formal training and instead rely heavily on informal knowledge situated within their communities of practice. In response to this, Grameenogram offers a one-stop solution for aggregating authentic online materials on topics and themes such as Grameen, micro credit, poverty, and capacity building through RSS feeds. Hypermedia files are presented in a classified format, including text, image, audio and video media with context-specific information on the aforementioned topics and themes. The aggregating website trawls for information from various social spaces and communities online and categorizes them according to the delivery and communications technologies they employ such as podcasts, vlogs, and blogs to enable quick recognition for their consumption, adaptation and reuse in micro credit learning initiatives.

Evaluation of an Online Course from a Theoretical Perspective

Zehra Akyol, University of Calgary, Canada

Distance learning is becoming a widespread phenomenon as a result of changing human needs and developments on technology. Therefore it is getting crucial importance how to design and develop effective and efficient distance learning environments in order to meet teaching and learning needs. Theoretical considerations as well as technological applications are critical issues in order to reach high quality distance learning environments. In the lights of some critical issues that affect the effectiveness of online courses, this paper examines an online course from a theoretical perspective. The author aims to explore how an online course reflects instructional and learning theories by assessing the course in terms of instructional design issues, the role of students and instructors, interaction and assessment according to constructivist point of view and self-directed learning. The paper concludes with recommendations in order to provide more effective online courses.

Turkish Undergraduates Perceptions of Distance Education

Zehra Akyol, University of Calgary, Canada; Hasan Karaaslan, Middle East Technical University, Turkey

In this study, it is aimed to examine undergraduate students' perceptions of distance education basing on their prior knowledge or experience. In the first week of a course about Distance Education, students were asked to write their opinions about distance education as the first week discussion after the instructor of the course had provided a brief introduction at the first lesson. Basing on their knowledge or experiences about the applications of Distance education they were intended to write their feelings, attitudes and interest in distance education. The results showed that all the students had positive attitudes towards distance education. Most of them were aware of the opportunities they could have in distance education. Students also identified some critical areas and put forward some suggestions in order to increase effectiveness.

A Moodle Course: Design and Implementation in English for Academic Purposes Instruction

Zakiya Al Naddabi, Language Centre, Sultan Qaboos Univeristy, Oman

This paper focuses on the use of Moodle as a course management system in teaching General Academic Purposes English at an intermediate level of an intensive language program. After describing the Moodle course and providing examples of its content, advantages of integrating it in teaching English as a Foreign Language (EFL) will be pinpointed. Also, problems and concerns about its use will be presented. Finally, recommendations for future developments of Moodle as an e-learning component in the program and in similar EFL programs will be outlined, as informed by the described practice of designing and implementing a Moodle course.

Factors Contributing To e-Learning Success: A Case Study In Hashemite University In Jordan

Mosleh Al-Adhaileh, Hashemite University, Jordan; Ahmad Al-Khasawneh, Hshemite University, Jordan

The use of e-learning initiatives in the academic and training institutions has been increasing in last few years. E-learning concept has been implemented by academic institution in Jordan universities such as Hashemite University in order to support their teaching-learning activity that is based on distance. E-learning activity is becoming popular to distance learning or online students who are unable to attend the class. This study attempted to identify factors contributing to e-learning success.

Analysis for the Problematic Relationship between Education, Technology, and Globalization

Mansour Aldojan, Ohio university, USA

The influence of globalization upon educational polices and practices have multiple, and conflicting, effects. Some can be classified as beneficial and others are not. And some are being shaped by active tensions and struggles. My goal through my discussion will be to highlight some of the multiple and complex effects of globalization on education, technology, and educational policy formation.

Evaluation Of Junior Faculty Online Development

Olga M. Alegre, University of La Laguna, Spain

Abstract: This study examines whether two online courses offering educational support for junior faculty have a positive effect on their attitudes and curriculum and teaching capacities (CTC) learning. The data used in the analysis are from two online University training courses. The tasks the online courses assign to faculty, the resources they provide, the learning environment they create, and the conversations they provoke proved to be consequential in shaping faculty's attitudes. The results also indicate that junior faculty who participate in individual and collective online developing activities, such as constructing teaching episodes and communicating with other colleagues, are more likely to gain a better understanding of how to teach their scientific disciplines.

Automated Tools for Writing Skills Tutoring and Support

Mary Alexander, University of Phoenix, USA

The University of Phoenix programs are writing intensive, and as such, we are challenged to provide tools and resources to aid students in the development of good academic writing skills. The large size of our enrollment, and the need to serve distance learning students as well as those at our traditional campuses, prompted us to create an automated system called WritePoint. This intricate web-based writing skills feedback system uses a large database to evaluate student papers for grammar, punctuation, word usage, and style issues. Students can submit a paper into the system and receive the feedback inserted directly into the text of the paper within four to ten seconds. WritePoint allows students to practice writing at anytime from anywhere, and it is a learning experience as opposed to simply proofreading or editing. The system is operating at a 90% accuracy rate, is customizable, easily revised and enhanced.

How Elementary School Teachers in Ankara Use Instructional Design Process: An Insight into Teachers' Daily Practices

Feride Alim, Soner Yildirim, Ercan Kiraz, Middle East technical University, Turkey

A qualitative study of public school teachers' use of Instructional Design process was conducted to have an insight about the teachers' daily practices. Although several publications can be found on how teachers plan and organize lessons, little literature can be found about how the teachers apply instructional design methodology while preparing their courses (Hoogweld, 2003). Therefore, this research will contribute to theoretical traditions in ways that will be new and insightful. In this research, the researcher used a qualitative research design, a descriptive case study approach in which data collected from 10 public school teachers via interviews and observations. The results of the study showed that the teachers use all Instructional Phases in some extend with some deficiencies. For example, although they use the design phase connected to the analysis phase, they rarely use the development phase. Therefore, these results would be used to give teachers additional training in the needed areas.

Perceptions of School Staff For Technological Changes: An Analysis of the Administrative Processes At A K12 School Setting

Feride Alim, Middle East technical University, Turkey; Meltem Baturay, Gazi University, Turkey

Recent social,political,and economic challenges obligate education institutions to adopt new educational technologies.To integrate new technologies to educational settings,there is a need to re-conceptualize administrative processes taking place in the schools.So,a qualitative study was conducted to have an idea about the perceptions of the school personnel towards technological changes through analyzing the administrative processes at a K12 school in Ankara,Turkey. In this study,the administrative processes were pre-determined as motivation,decision-making,communication and organizational change.A descriptive case study approach was used and data collected from five teachers,an administrator and an officer of a K12 public school via interviews.The results showed that the administrators were trying to adopt the technological advances by

using many different administrative processes.This study might be valuable to shed in light the administrative processes for technological changes and it might help to the administrators to adopt the technological changes more easily.

Genders and Journals

Bobbe Allen, Utah State University, USA

Fifty three years of the journal, Education, Technology, Research and Design (ETR&D) were examined to determine the trends in gender authorship. Findings indicate that there has been an increase in female authorship in the last few decades, although it coincides with an increase of co-authorship with men. There were three years, once in the 80's, once in the 90's and once in thee last few years that single authorship by women was in parity with men. And once, toward the end of the 80's women authors exceeded the number of men during a year long period, but never in one journal at one time. It was also discovered that a man has always been in the position of Editor, unequivocally. This research brings attention to women as authors in a professional journal in order to facilitate a dialogue.

An Educational Game for School Students

Majdi Al-qdah, Aznan Falzi, Multimedia University, Malaysia

This paper presents on an application that uses a new method of learning, which is through computer games. It reports on the design and development of an educational game. The developed game is one that is dynamic and adaptable. Being dynamic means the game dynamically load material to be used as part of the game's immersion content as well as educational value. This allows the game administrator for an easy swap or addition of game wise content to add game play or playing features. Adaptable means the game prompts for the user's preferences and choices which in turn will change the game environment according to the settings the user picks. The player will choose his attack type and the successfulness and strength of the attack based on the player's ability to answer the given question that pops up every time the user prompts for an attack move – which is related to some school subject.

Learner Generated Content Using Web 2.0 Technologies

Abdullah Alshehri, King Khalid University, Saudi Arabia

Using web 2.0 technologies, Student learn through a weekly production of the course content. Students are guided and graded through the process of creating the course content. This process involves search , share, reflect, and collaborate.

Collaborative Pre-service ICT Teacher Education 1/3 the Way Around the World: The Potential of the Internet for Cross-cultural Learning

Isabel Alvarez, Autonomous University of Barcelona, Spain; George Olson, Roosevelt University, USA; Brent Kilbourn, The Ontario Institute for Studies in Education, University of Toronto, Canada

This paper describes a project in which pre-service students from two countries (Spain and USA) learned about the use of Information Technology in teaching/learning by communicating with each other via a web-based asynchronous electronic group workspace. Students in Barcelona and Chicago collaborated with each other for nine weeks using information technology to learn about (1) using IT to learn, (2) cultural similarities and differences, and (3) alternative ways of teaching/learning. Evidence suggests that "global pedagogy" via the Internet can be used in a cross-cultural setting to open students' eyes to alternative ways of teaching and learning and can promote mutual tolerance and understanding.

Can E-Learning change Higher Education?

Dodzi Amemado, University of Montreal, Canada

In line with the conference keynote, this paper treats of e-learning and particularly puts a slant on the precedence of the community centered approach in e-learning to change higher education. It's mainly a literature review based on researchers'works about the influence e-learning can or cannot have in higher education.

Beyond Videoconference: Increased Functionality to Enhance Media-Rich Interactions in Teaching and Learning

Elahe Aminifar, Richard Caladine, Anne Porter, Mark Nelson, University of Wollongong, Australia

Modern technologies provide new approaches to tertiary education and will be an increasing component of the educational experience in the future. Their use poses a significant challenge to the design and delivery of teaching and learning as many teachers and students are unfamiliar with them in this context. Over the last decade there has been a very rapid expansion in the capability and usage of Information and Communication Technologies (ICTs) in teaching and learning. To use them effectively there is a need to understand how different ICTs can be applied to learning and teaching. Videoconference, Access Grid and Web Conference Applications (WCAs) are now available for use in higher education. The technologies are compared with a view to recommending which ones to implement for teaching and learning.

A Writing Support Tool for Learners of English as a Second Language

Kazuaki Ando, Yuichi Tsunashima, Kagawa University, Japan; Shoji Mizobuchi, Kinki University, Japan

This paper proposes a writing support tool for learners of English as a second language by using search engines. The proposed tool consists of a composition support module and a learning module. The composition support module automatically constructs queries from an entered words, expressions and optional information. The module provides ranking tables and graphs based on hit counts of those queries, and usage of the entered words and expressions based on user's level of English vocabulary. It is considered that user's search logs include important information for learning support. The learning support module classifies and outputs user's weak points by analyzing the search logs. The module automatically creates quizzes to overcome his weak points. Moreover, the module makes words and phrases lists based on user's level of English vocabulary. By utilizing the proposed tool, a user can search usage of the words and expressions on the Web, and verify the sentences and expressions which the user wrote by the hit counts of them. The user can also learn English effectively.

Students Develop and Build Their Own Textbook:Interfacing Research and Application into Courses That Require an Examination of Current Extant Literature OR The Professor Didn't Do Much….[Now] I Own the Knowledge

Faye Angel, Gary Angel, Faye Angel, Gary Angel, Ferrum College, USA

The emphasis of this presentation is threefold: 1) teaching courses that charges students with the responsibility for active learning, 2) mitigating the exorbitant cost of college textbook, and 3) engaging in collaborative and cooperative teamwork to produce a current, up-to-date resource manual. Instead of using an out-dated textbook, students conduct primary research to understand the contemporary issues. This research and their presentation of it become their textbook/resource manual. It is current and relevant. Although the professor's role appears to be facilitator, it is much more. In a class such as this, the professor must be knowledgeable of the subject and be able to maintain the focus of the course. This is sometimes a challenge as students get excited about a topic and tend to "stray" away from the defined course objectives. At the heart of this pedagogical procedure is significant research, application of concepts and theories, and full participatory discussion. The monetary cost of their textbook is 32 cents—the cost of a CD.

A Development of Learning Management System for Interactive E-Learning in Higher Education

Fumihiko Anma, Toshie NInomiya, Toshio Okamoto, The University of Electro Communications, Japan

From 2004 to 2007 our university has a three-year project called 'GP Project' which is a part of national project named "Selected Efforts of the Distinctive University Education Support Program (Good Practice Project, abbreviated as GP Project)", with the support of the ministry of Education, Culture, Sports, Science and Technology of Japanese government. In this project we are challenging to replace more than 30 existing courses with e-Learning. The courses must be seamlessly integrated to course grade information system which has been already being in use for years in educational affairs section. For this integration we introduced a new Learning Management System which is easy to customize so that it can integrates course grade information and e-Learning information. We developed a Learning Management System (LMS) by modifying a commercial LMS WebClass which is easy to add new functions.

Empowering English Learning Utilizing Podcasts

Yayoi Anzai, Aoyama Gakuin University, Japan

More and more web 2.0 technologies are being implemented in education; examples include podcasts, Wiki, and blogs. Bonk (2007), for example, demonstrated how these emerging technologies can be integrated into participatory learning environments. With these new technologies, learners can overcome physical distance; physical distance is not the solely definitive distance for learners any more. Under these circumstances, this study aims to explore effective use of podcasts to empower English learning for EFL students. By implementing podcasts in class, it is found that podcasts are beneficial because of their authentic contents, accumulation of chronologically ordered contents with Really Simple Syndication (RSS), mobile learning, and free subscription. Thus podcasts are definitively one option to consider for empowering English learning.

Podcasting and Japanese Millennials

Yayoi Anzai, Aoyama Gakuin University, Japan

The purpose of this paper is to analyze "the Japanese Millennial Generation" with reference to podcasting. Learners have more options now, with web 2.0 technologies, regarding how they achieve their goals. Now the technology promotes participatory, learner centered learning. To implement podcasting and other web 2.0 technologies effectively in Japanese higher education, it is necessary to understand the target of the education, Japanese Millennials. For this purpose, the first part of this study aims to understand "the digitalness of Japanese university students" in view of "podcasting" and "mass media consumption of Japanese Millennials." Second, the paper discusses the characteristics of Japanese Millennials in terms of preferences in learning styles. A survey was conducted in the first semester in 2007. The results will be beneficial for designing e-learning activities, especially using podcasting.

The Impact of U.S. National and State Level Policy on the Nature and Scope of K-12 Virtual Schooling

Leanna Archambault, Kent Crippen, University of Nevada Las Vegas, USA; Anna Lukemeyer, Unversity of Nevada Las Vegas, USA

During the past five years, virtual schools in the United States have gained popularity and acceptance as viable alternatives to the traditional school system through provisions for charter schools under Title V, Part B, Subpart 1 of the Elementary and Secondary Education Act of 1965 (ESEA), as amended by the No Child Left Behind Act of 2001. This paper describes the existing federal policies that are driving the online virtual school movement, and how one state, Nevada, has set forth and interpreted specific policies regarding online distance education. In addition, this paper identifies the beliefs acting as the driving forces behind such policies in the United States and discusses implications for other countries also seeking to set forth guidelines for K-12 online distance education programs.

eSUCCESS: A Research Based Framework for the design, development and deployment of web-based learning and blended learning.

Ann Armstrong, Teachers College Columbia University, USA

eSUCCESS is a framework that consists of eight tenets garnered from the analysis, synthesis and interpretation of findings in a qualitative, multi-case study combined with information from the literature and the researcher's life experience. It is expected that this framework will be useful to e-learning professionals in designing, defining, developing and deploying web-based learning for adult professional development and workforce training. The eight tenets are: (1)Executive Sponsorhip;(2)Support from the Organization;(3)Understand and Motivate the Learner;(4)Culture Fosters

Learning;(5)Content is Relevant to the Learner and Organization, (6)Evaluate and Assess; (7)Structure of Program is Engaging, Interactive and Blended and (8)Simulate the Work Environment and Work Tasks

Leveraging Expert Faculty Presence: One Course, Two Unique Learning Environments, Simultaneous Delivery

Ann Armstrong, Teachers College Columbia, USA; MaryRose Barranco Morris, David Solomita, Linda Bloom, Teachers College Columbia University, USA

As innovators of delivering alternative learning experiences at Teachers College Columbia University, our goal was to leverage and scale expert faculty presence by conducting one course simultaneously in two uniquely different learning environments. Using a traditional classroom model combined with a synchronous online web-cast communication system our students and faculty experiences the best of both worlds. As the pilot for this challenging technological endeavor, we chose "Discussion as a Way of Teaching" facilitated by distinguished professor and author, Stephen Brookfield and co-facilitator and author professor Stephen Preskill. The goals of the pilot were to establish guidelines that demonstrated the benefits and challenges associated with facilitating and managing an onsite/online delivery in a simultaneous environment. We outline the logistical procedures, the techniques that were of value for successful implementation, and conclude with factors that are critical for success.

Measuring the Correspondence between the Teacher's Intended Point of Attention and the Student's Actual Point of Attention in Web-based e-Learning Contents

Nobutake Asaba, The University of Kitakyushu, Japan; Masateru Hishina, Tokyo International University, Japan; Roberto S. Okada, Miyagi University, Japan

One of problems on Web-based e-Learning is due to the differences in perceived degree of importance or required attention on particular portions of the learning materials between teacher and student. We have performed a study to see what are the portions the teacher intends the student to pay special attention to, what are the portions the students actually pay attention, and a check of correspondence between them. Through Content Evaluator which we have developed, we have gathered the emotional reaction data along the time axis in the learning materials that the subject in the teacher's role thinks he/she is important and the subject in the student's role has actually paid attention. Then we have compared these data. As a result, we have verified that it is possible to detect the portions in the Web materials where the gaps in interest between teacher and student occur.

M-Learning from a Cell Phone: Improving Students' EMP Learning Experience through Interactive SMS Platform

Jafar Askari arani, KASHAN university of Medical Sciences, Iran (Islamic Republic Of)

Objective: This paper aims to describe the development of a mobile-based interactive learning environment (MOBILE) in classroom as well as to understand the impacts that mobile applications such as short -message-services (SMS) can have on students' EMP (English for Medical Purposes) learning experience. Method & Material: A brief description of the system as well as the trial that took place is presented. Based on the literature described on mobile technologies and ICT in the classroom and pedagogy, two new classroom dynamics were designed, applied and evaluated i.e. SMS Feedback and SMS-quiz. Subsequently a discussion of the survey results, obtained from 40 students of medicine studying the EMP course, is presented.

Web-based Forums: Effects of Their Use on Students' Success

Cengiz S. Askun, Middle East Technical University, Turkey

Results of a study on the effects of use of Web-based forum tool on the success of students and their in-class participation is reported. The study was undertaken at a large university in Turkey. Forty-nine students were matched first and then randomly assigned into one or the other section of a course, control and experimental groups. In addition to access to a course Web site, a Web-based forum tool was used to augment the face-to-face classroom activities for the experimental group while the control group was only allowed to access the course Web site. Experimental group was found to be more successful according to the results of a t-test analysis of the mean scores of their various assessments.

Design Models and Their Implication for Interface Design of Children's Educational Software

Ofra Aslan, Saul Carliner, Concordia University, Canada

This position paper synthesizes the results of a literature review on interface design theories, and suggests how they might be applied to the design of interfaces to be used by children. Three design theories are described including User-Centered design, Learner-Centered design and Performance-Centered design in an attempt to contrast their similarities and differences and their application to the design of educational software for children. Given that design theories are goal-oriented and prescriptive, the paper demonstrates that it is the goal of the theory rather than the processes associated with it that determines the ultimate interface design. While guidelines for the design of software interfaces do exist, they are on their own of little value; they can only be effective when applied during the design process while employing a specific design theory.

Self-Regulated Teachers: Catalysts for Technology Integration

Ofra Aslan, Kelly Morris, Concordia University, Canada

This position paper discusses the potential for self-regulatory technology skills to bridge the gap between technology integration expectations and current adoption trends. Drawing on diffusion and adoption theory literature, research on self-regulation, state of the field reports in Canada and the United States, as well as their respective technology curriculum standards, the authors propose a change in preservice technology integration course methodology. The proposed change, shifting the focus away from basic software instruction and toward the development of a self-supporting orientation toward

developing technology skills, would be supported by a self-regulation framework of instruction within technology training courses at the preservice level. Future directions for research are explored.

Academicians' Readiness for E-learning: An Important Aspect for Communication Education

Murat Ataizi, Anadolu University, Turkey

This study will be investigated self-efficacy levels of communication teachers (academicians) toward online technologies to be able to measure their readiness for e-learning. The study will be conducted at communication sciences school at Anadolu University in Turkey. Approximately 80 academicians will take part in the study. Results will currently being analyzed according to gender, teaching experience, department and age. To collect data from the participants Militate and Yu scale (1999) will be conducted. The results of this research will indicate communication schools staffs' levels of e-readiness and the levels of self-efficacy toward the computer and online designed courses and programs. People who are designing the university level courses and degree programs on communication and social sciences areas may get some benefit from this research.

The Best of Both Worlds

Sandi Atols, Chicago Public Schools, USA

The Distance Learning (DL) program at Chicago Public Schools (CPS) recognizes the importance of meeting individual student's needs, preparing learners for living and working in today's society, and honing skills learned through online courses as a catalyst to students' future success. The DL program in partnership with the Illinois Virtual High School for five years has evolved. Currently, implementation of a best practice model which maintains a strong support system with mentor teachers to facilitate, mentor, and coach online students who are working in the classroom during the instructional school day has increased the students' successful completion rate to 80%. Building on students' satisfaction and success, an innovative small, hybrid high school is being proposed that combines quality online curriculum with great teachers in classroom labs. A philosophy of 3 R's: rigor, relevance, and relationship (Cincinnati, 2004) in this positive, engaging environment will be the stimulus for increased attendance and graduation rates.

The New Taxonomy of Educational Objectives and Implications for Designing Instruction for Distance Learning Delivery

Bosede Aworuwa, Texas A&M University-Texarkana, USA; Bessie Nkoge, North Carolina A&T University, USA

Abstract: For decades, educators have based organization of instruction and assessment of learning on the Bloom's Taxonomy and other taxonomies of educational objectives. The New Taxonomy of Educational Objectives by Robert Marzano (Marzano and Kendall, 2007) bridges the gaps in the older taxonomies, in addition to providing a framework for designing learning experiences that are more relevant to today's technology savvy learners. The new web-based technologies such as podcasting, virtual communities, social networking tools, and online educational games, have implications for designing instruction for the type of learning outcomes described in the new taxonomy.

Design Principles of an Online Language Education Program

Cengiz Aydin, Anadolu University, Turkey

Turkce is a language education certificate program, designed and developed by Anadolu University. It aimed to help non-Turkish speakers acquire basic reading, writing, listening and speaking skills in various daily life contexts such as shopping, eating, traveling, and so forth. The presentation provides an insight about design and implementation strategies of this program.

Design, Development and Evaluation of Web Based Learning Management System at Universiti Putra Malaysia

Sidek Aziz, Universiti Putra Malaysia, Malaysia

The goal of this research is to develop an LMS that suits the ICT competency of lecturers and students in UPM. Meanwhile, the objectives of this research are to identify the lecturers' perception on the necessity in developing the LMS in order to inculcate the culture of e-learning as well as to assess its usage among lecturers and students. Hence a prototype LMS based on the Rapid Prototyping Design Model has been developed. Lecturers' perceptions toward e-learning from the aspects of attitude, skills in technology as well as fields of expertise were examined to identify the lecturers' need to use the LMS prototype. The developed LMS prototype was applied to students who enrolled in the courses of BIP3501 and PHY4202. The difference in the pattern of preference for a particular modules was apparently due to the learning method adapted for the course PHY4202 is more of Student Centered Learning (SCL) method while the course BIP3501 is more of Teacher Centered Learning (TCL) oriented.

E-Learning Application for Process Planning

Anita Babic, Ivan Belosevic, University of Zagreb, Faculty of Mechanichal Engineering and Naval Archictecture, Department of Industrial Engineering, Croatia; Goran Stjepanovic, University of Zagreb, Faculty of Electrical Engineering and Computing, Department of Software Engineering,, Croatia

The aim this initial phase of research is to evaluate production times. These times are results of defined sequence operations, and they will be main criteria for estimation of production costs and deadline of delivery. The field of our research is defining the main criteria for selection of primary processes and types of operations in production. Selection of primary process is based on nature of material, quantity, complexity of form, size of part and some other factors. Type and sequence operation are results of influence different factors as product shape, surface roughness and tolerance. In application will be used some aspects of knowledge base. Application will enable users to understand procedure of selection primary process and sequence operations with possible additional technological gradation support. It is planned to include in application self

testing of students. In application will be used technologies of Visual Basic.NET inside WebCT and as stand alone application.

Anonimity in Cyber Education...Should you be concerned?

Bobbe Baggio, Advantage Learning Technologies, Inc., USA

The purpose of this presentation is to explore the pros and cons of anonymity in cyber education and discuss possible implications in online learning. It evaluates both sides of the issue and presents them in a way that will help cyber educators and instructional designers understand the social, cultural and educational implications of anonymity. The PATRIOT Act and other initiatives impacting anonymity are discussed, including the far-reaching effects of anonymity within online educational settings and group dynamics. This presentation will further compare and contrast anonymity's potential for limiting and monitoring academic freedom to the social benefits it brings, while discussing the social identity model of deindividuation and how social presence can be enhanced by planning for interaction through the instructional design process.

eLearning Production and Academic Health

Angela Bah, University of Brighton, UK

Abstract: The creation of eLearning in HE (Higher Education) is a complex issue and the accessibility of resources to students has not been widely assessed. Teachers in HE are subject experts, but have variable IT skills, transferring course resources to a VLE (Virtual Learning Environment) in digital form is a challenge. A wide range of skills and knowledge of computing, design, and pedagogy are required to create effective online learning resources. Currently the quality level of online learning resources in HE is generally controlled by academics. The cost of professional eLearning design is very high, so academics will be expected to acquire new skills, as well as find time to create quality learning applications in a digital environment. The addition of the requirement to comply with disability legislation is another level of complexity in the situation but has to be addressed to make online learning accessible to all students.

How Medium Affects Message in Digital Learning Environments

Angela Bah, University of Brighton, UK

Abstract: HE (Higher Education) institutions in the UK are increasingly relying on VLEs (Virtual Learning Environments) to deliver courses online; but true accessibility of resources is variable and typically does not meet the needs of all students. Disability legislation should ensure access for those with special educational needs when "reasonable adjustments" are made. Evaluating access to course resources by students with SENs (Special Educational Needs) such as vision impairment, and SpLDs (Specific Learning Difficulties) such as dyslexia, led to an examination of the problem and initial development of a model to aid categorisation and quantification of access difficulties. Those preparing course resources need to know where problems may lie, how to test for them, and how to find priority areas to address.

The Nintendo Wii Games Console and its potential for Supporting Disabled Learners in Education

Christopher Bailey, Elaine Pearson, University of Teesside, UK

This paper describes a new project aimed at investigating the potential of the Nintendo Wii games console to support learners with disabilities. The Wii represents an innovation in the way players interact with games through the use of a remote control input device that provides a more intuitive and interactive means of control. The project builds on existing research that demonstrates that video games can be used successfully in an educational context to develop skills and as a motivational tool. By selecting a variety of game genres and evaluating them with focus groups based on students with particular types of disability, the objective is to examine the accessibility of the games console and evaluate its potential for supporting disabled learners in an educational context. We anticipate the results of our evaluations will enable us to produce an outline specification for bespoke games that can be used in an educational context.

Virtual Laboratory for Chemistry (VLab-Chem) Based on Constructivism-Cognitivism-Contextual Approach

Hajah Norasiken Bakar, University of Technical Malaysia Melaka(UTeM), Malaysia

This paper highlights the development and evaluation of the virtual laboratory for teaching and learning of chemistry (VLab-Chem). Through the VLab-Chem, Students can interact with the materials and apparatus, and are also able to do experimental observations through animation and simulation technology. Discussions in this paper will involve descriptions on the theoretical framework and modeling of the system, of which the developmental process can be divided into four parts:analysis, design, development and evaluation. The paper will also discuss the problem statement, the development of the VLab-Chem for teaching the topic:salt; the design and architecture involved, sound learning theories such as the constructivism-cognitivism-contextual approaches embedded in the design, and the implementation of concepts such as learning-by-doing,contextual education,simulation, and animation to create a virtual based learning in the VLab-Chem.

Anchored Instruction, Situated Cognition, Ill-structured Problem-Solving: A Cognitive Evaluation of Multimedia Case-based Instruction

Elizabeth Baker, University of Missouri-Columbia, USA

Effective literacy teachers share a variety of instructional traits such as the ability to kidwatch, cognitively reflect, and make informed decisions based on ill-structured and complex data. Teacher educators face the challenge of helping preservice teachers develop such traits so as to prepare them to be successful literacy teachers. One method being used is case-based instruction (CBI). With the support of three grants, over a six-year period, we created a series of multimedia cases for literacy education referred to as ChALK (Children As Literacy Kases). The purpose of this empirical report is to weave together insights that emerged during multiple investigations into the use of ChALK and compare them with findings from other CBI studies. During this session we will demonstrate ChALK and discuss research findings.

Reading and Writing in Electronic Environments: An Exploration of New Literacies and Implications for K-12 Literacy Curricula

Elizabeth Baker, University of Missouri-Columbia, USA

The purpose of this session is to juxtapose traditional foci of reading and writing instruction in K-12 schools with text-based technologies (e.g., blogs, Fanfiction, IM, email, hypertext, web searches) and multimedia-based technologies (e.g., video embedded environments, podcasts, wikis, Secondlife). We will show traditional materials used to teach K-12 reading and writing and compare them with text-based and multimedia-based technologies. We will discuss the need for reform in curricula for higher education (specifically teacher education) and K-12 literacy curricula.

Best Practices: Games and E-Learning in Collaborative Environments

Nina Bakisian, University of San Francisco, USA

The goal of this best practices session is to demonstrate that games can be a positive learning tool in the e-learning environment. By embedding humanistic components into educational games, we as curriculum developers, can have a greater impact on content development that is produced and distributed in online and blended environments. Additionally, we can involve our students in game creation by using easily available technology templates. By creating and distributing games through a collaborative environment, students can learn how to be better students and better citizens. This session will discuss the experiences of a university instructor who uses games to engage students in their learning. By having students teach each other through games they create, deeper learning is fostered and technology skills are enhanced. This assists in preparing students for work in the knowledge economy. By working with the skill set of the millennials, rather than against it, instructors can take their role as "guides on the side" to a new level.

e-Learning after Web 2.0

Radu Balog-Crisan, Ioan Roxin, Franche-Comté University, LASELDI, Multimedia Department - Montbéliard, France

Any new attitude or technology that is running on the Web is more or less adopted into the e-Learning domain. Web 2.0 brings new ideas into the e-Learning like many-to-many communication schemes, which constitute the foundation of Web 2.0. In this article we suggest using Resource Description Framework (RDF) to describe metadata, corresponding to Learning Object Metadata (LOM) data model according to the standard. By using RDF we can define concepts, we can assign meanings, and we can also design relations between concepts. We think this is a necessary step forward in the context of Semantic Web and learning objects; so this could lead to the next generation of describing metadata description or even to reach higher level such as ontology. We propose an on-line tool called RDF4LOM, to edit metadata in RDF.

Using On-Line Writing Instruction to Bring College Students into Academic Community

Shoba Bandi-Rao, New York University, USA; Jennifer Radtke, Long Island University, USA

We share our best practices in teaching writing to freshman college students in a joint project between New York University and Long Island University. In this effort, we have found that appropriating rather than resisting technological fluency facilitates many of the problems arising out of the changed academic environment. As teachers at an urban university with students from diverse backgrounds, we find ourselves working, in our first year writing courses, to complicate both the writers' identities our students bring and the teacher identities they expect us to enact. Online media have offered some new opportunities for the exploration and complication of both identities in the commonly-used Blackboard. BlackBoard is a generic virtual classroom, not designed specifically for a writing class. Its communicative tools have limitations. We designed and developed the E-Discussions site to meet the specific writing needs of our student population.

PowerPoint Games in K-12 e-Learning Environments

Michael Barbour, Wayne State University, USA; Jim Kinsella, University High School at Illinois State University, USA; Lloyd Rieber, University of Georgia, USA

There is no denying the success and popularity of WebQuests among teachers. WebQuests are very creative and very useful. For those of us interested in technology integration in the schools, this is a significant step in the right direction. Yet, WebQuests are instructivist examples of technology integration – they are web-enhanced forms of direct instruction (albeit some teachers have students create their own WebQuests). We consider constructing homemade PowerPoint games as a constructionist alternative to WebQuests. PowerPoint is nearly ubiquitous software tool and PowerPoint games are already a familiar part of many classrooms, though usually in the form of already existing games (such as Jeopardy) that a teacher modifies for instruction. This project is different in that it contends that a better use of class time for learning is to turn over the act of game design to the children themselves. In this project, students in social studies course delivered by a mid-western high school designed PowerPoint Games as a means to review for portions of their mid-term examination.

Using Blackboard to Manage Students' Projects

Philip Barker, University of Teesside, UK

Practical projects play an important role in developing students' problem solving skills and enhancing their knowledge of a specific area of study. However, from a course-supervisor's perspective, their management and assessment can be a highly labour-intensive activity. This paper describes some research that we have undertaken relating to the use of a virtual learning environment (Blackboard) in order to automate some of the management tasks and problems inherent in project supervision - while increasing the quality of students' learning experiences.

An Experiment with Conversation Theory as a Candidate for a Meta Learning Theory

Balbir Barn, Thames Valley University, UK

This paper argues that educational theories are complex and it is their structural complexity that prevents understanding and easy application to learning. In order to support E-Learning, software tools to aid the understanding and application process can only be developed if there is a formal model for describing educational theories – a computer readable conceptual model

which can act as reference model and provide visual representations of their inherent complex nature. This paper suggests that before it is possible to describe a meta model for learning theories it is necessary to have a more detailed understanding of the nature and form of a meta learning theory. The paper reports on an experiment on using Gordon Pask's Cybernetics based Conversation Theory as a candidate meta learning theory. The paper contributes a UML representation of Conversation Theory and presents experimental comparison data with other theories using the UML model as the basis for comparison.

Show and Tell: Usability Testing Shows Us The User Experience And Tells Us What To Do About It

Carol Barnum, Southern Polytechnic State University, USA

Assessment is a necessary part of assuring the quality of our e-learning products. But does it gives us the whole picture? Does it show us what it's really like to be the user of the learning product? Does it tell us what our users want and need from the course? We can build the best courses, using the latest tools and tricks of the trade, including web 2.0 and gaming techniques. But, how do we know if our users are engaged, satisfied, and pleased with their learning experience? And, more importantly, how do we know what frustrates or annoys them to the point of quitting? Usability testing, in which we observe and listen to our users while they are using our courseware provides the essential insight that goes missing in any other quality or assessment tool employed for this purpose. This talk shows and tells how usability testing works in an e-learning environment, what insights it provides to course developers and designers, and when and how we can introduce it effectively, both in terms of cost and time.

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The Tale of Two Online workshops

Sari Bar-On, Levinsky College of Education, Israel

Novice teachers participate during their induction year in an online workshop, where they discuss work related difficulties in order to promote reflective thinking-an important tool for teachers. Discussion groups are perceived as promoting reflective skills. Deep interviews and auto-ethnography were the methods used for qualitative research on two online workshops. The findings suggest that the different moderating styles of the moderators are the key factor in the interactive online learning. Thus, the achievements of novice teachers in gaining autonomy, interaction in working groups, acquiring better understanding of their profession and gaining better reflective skills are in correspondence with the moderating style. The importance and influence of the educational philosophy of the moderator is demonstrated by discourse analysis of the interactive sessions

Ontario Clinical Education Information Systems

Haig Baronikian, eFuel Partners Inc., Canada; Audrey Danaher, Council of Ontario Universities, Canada

This paper describes the motivation, experience, lessons learned and plans regarding two clinical education information systems for Ontario, Canada. The systems (one for nursing programs; the other, for rehabilitation sciences) have been designed for both academic and clinical users. Between them, the two systems: support and enhance clinical placement processes; provide e-orientation for students and e-learning for user training (nursing); and, facilitate the development of local, regional and provincial stakeholder communities. The needs analysis, planning, development and implementation of these systems have been very instructive. We will share insights concerning project structure and stakeholder representation, communication and collaboration, change management, privacy aspects as well as leadership and vision. Our plans for further development and integration of clinical placement processes with e-learning and e-orientation will be discussed.

Moving Online Meaningfully (MOM) Project: moving meaningfully into and within online learning technologies at the University of Northern British Columbia

Penelope Barrett, University of Northern British Columbia, Canada

Nursing education is expanding in northern BC, with the University of Northern British Columbia (UNBC) offering a BScN through campuses in three cities. A rise in student numbers and learning locations parallels an increased expectancy that faculty will employ online learning technologies. To enhance consistency across multiple sites, nursing faculty are being strongly encouraged to engage with platforms such as WebCT and Elluminate Live. This presentation of research-in-progress will showcase findings from Stage 1 of the MOM Project – design-based research underway at UNBC. Outcomes will be presented arising out of reflective discussions amongst Learning Circle participants – nursing faculty and staff involved in using or facilitating use of online technologies. As well, evaluation of group-generated strategies designed to enhance effective, meaningful application of these technologies and improve participants' pedagogical insights and practices will be highlighted.

A Digital Tool for Self-Assessing Information Literacy Skills

Josianne Basque, Diane Ruelland, Marie-Claude Lavoie, LICEF Research Center, Télé-université, Canada

To encourage students to recognize the value of information literacy skills and to improve these skills, we have developed an online tool called infoCompétences+. This tool allows users to assess their level of information literacy skills, consult an overview of their strengths and weaknesses as individuals and as part of a group, and obtain a list of resources to help them improve their skills. The development of this tool was funded by the Université du Québec and built on research projects carried out at the LICEF Research Center on the topic of competency management in training environments. In this paper, we describe the tool, as well as the results of usability tests conducted with the assistance of 35 university students. Major findings indicate that the students found the tool useful to complete their studies, to know more about themselves, as well as about the information literacy domain. Based on our initial work, a generic shell was recently developed to allow university professors to apply the tool in a variety of other knowledge fields.

Instructional Design of Authentic E-Learning Environments

Theo Bastiaens, Institute of Educational Science and Media Research at the Fernuniversität in Hagen, Germany & Open Univ. of the Netherlands, Netherlands

It has been generally accepted by education and industry that technological and societal changes have led to a need for complex knowledge and skills in both higher education and the workplace. A 'new' view on learning has emerged, based on social-constructivist and situated theories, in which real-world problems are presented to students/trainees. Modern instructional-design (ID) models assume that realistic and rich learning tasks are the driving force for learning. Well-designed learning tasks stimulate learners to integrate and coordinate required skills, knowledge, and attitudes in a way that can be transferred to real-life conditions.

These developments put forward the need for a design model to accommodate complex learning tasks. However, since such design models are relatively rare, Certainly in the field of E-learning. Designers often have to fall back on their own ideas and intuition when designing and developing their E-learning materials. Even when models are available, designers are challenged to create learning experiences that leave deep and lasting impacts on learners, targeting not just skill development but changes in identity as learners come to see themselves as competent problem solvers and team contributors. This tutorial examines the so-called 4C/ID (Four-Components Instructional Design Model) from Jeroen van Merriënboer (1997) for the development of authentic e-learning tasks.

Exploring the Humanities in an Online Environment

David Beach, George Mason University, USA

Students in a college-level introduction to humanities course take virtual tours of galleries, view live performances through streaming video, and then create their own audio visual materials (video, podcast) through resources and instruction embedded in a course management system.

What does voice have to do with it? Using audio files to connect with students in online courses

Lorraine Beaudin, Jim Henry, University of Lethbridge, Canada

The text-based nature of online courses impose natural restrictions to online teaching and learning. Written text, even with visual support, can limit the range and type of learning activity and communication that can be delivered online (Beyond Text Website, August 2007). Switzer (2005) states there are clear ways to establish a "welcoming environment" and a positive "instructor presence" that reach and motivate online students. The "human factor" is not missing online, it merely appears in a different guise. One potential way to create the human factor is to use audio messages in an online class. Student-teacher and student-student interactions in purely asynchronous distance learning courses are much lacking compared to similar interactions found in face-to-face teaching, potentially causing learners to experience feelings of isolation, thus reducing motivation and increasing dropout rates (Boulos, Tayor, & Breton, 2005). This paper gives an overview of why voice might offer a simple and effective method for enhancing students' experience in the online classroom.

Run-Time Environments: The Balance Between Good UI and Robust Features

Peter Bedell, Cisco WebEx, USA

Finding a balance between good UI and robust features within a Run-Time Environment can be challenging. We will explore the differences between RTE and SCO level controls, examine 3 visual examples of RTE's, and use WebEx University's RTE as a current development problem and solution walk through.

Barriers to e-learning for students in the United Arab Emirates and Oman

Donna Behl, Dubai Women's College, United Arab Emirates; Jean Fitzgerald, Abu Dhabi Women's College, United Arab Emirates; Lejla Vrazalic, University of Wollongong Dubai, United Arab Emirates

E-learning is relatively new to the United Arab Emirates. Most tertiary institutions have allocated ICT resources to provide alternatives to the previously used teacher-centred "chalk and talk" approach to learning and teaching. However we have not yet developed a comprehensive understanding of the application of e-learning methods and resources in the tertiary education sector in the UAE. This paper describes a collaborative research project which explores the perceived barriers to e-learning for students studying at tertiary institutions in the UAE and Oman using an online questionnaire. The paucity of literature from Gulf countries highlights the timeliness of discussion about barriers for students to the e-learning environment. A literature review highlighted themes of ICT environment issues, student characteristics, support for students, and authentic activities. The research findings will inform faculty who are integrating technology in their teaching and the tertiary institutions encouraging the use of e-learning as an integral part of the learning environment.

Using the Experience of the International Consortium to Shape the University Strategy for E-Learning

Zoran Bekic, University of Zagreb University Computing Centre, Croatia; Damir Boras, University of Zagreb Faculty of Philosophy, Croatia; Sandra Kucina-Softic, University of Zagreb University Computing Centre, Croatia

The paper is based on the authors' experience in coordinating EU Tempus project EQIBELT: Education Quality Improvement by E-Learning Technology. The paper presents the conclusions of the EQIBELT policy workshop on creating e-learning vision and strategy. Most of the conclusions are based on experience and best practices of eight European universities - members of the EQIBELT consortium. The paper also deals with the basic elements of the E-Learning strategy of University of Zagreb, which was shaped in the framework of the EQIBELT project. Paper points out the value of experience accumulated within the consortium, but also emphasizes that it is highly important to find an appropriate particular way of introducing and using e-learning at each university in particular circumstances. It is also very important to precisely define concrete strategic goals for implementation of e-learning at particular university and to provide and settle strict implementation plan for the e-learning strategy.

Agent-based Collaborative Affective E-learning System

Mohamed Ben ammar, REsearch Group on Intelligent Machines (REGIM), Tunisia

This paper explores Collaborative Virtual Environments (CVEs) for Affective Elearning as an alternative communication technology potentially allowing interlocutors to express themselves emotionally in an efficient and effective way. Potential applications for such CVEs systems are all areas where people cannot meet together physically but wish to discuss or collaborate on certain matters, for example in distance learning based in the affective communication. Moreover, we will explore how the agents can communicate emotion. To investigate how emotions can efficiently and effectively be visualized in CVEs, an animated virtual head (Emotional Embodied Conversational Agent) was designed to express the six universal emotions. In this research work, we propose emotional framework for an intelligent emotional system. This system is called EMASPEL (Emotional Multi-Agents System for Peer to peer E-Learning), based on a multi-agents architecture.

A Web-Based E-Portfolio Support System For Teacher Education Students

Sue Bennett, Lori Lockyer, University of Wollongong, Australia

There is increasing interest in electronic portfolios as a means of collecting and presenting information about an individual's attributes and experiences. As part of their course of study, learners may be asked to assemble a portfolio to provide a detailed, evidenced account of their learning experiences over an extended period of time. Employers are also beginning to use portfolios to identify employees that match their requirements. Portfolios have the potential to address the limitations of transcripts of academic achievement and references, which present a view of achievement that is mostly isolated from the learning context and the student's experiences on their path to gaining qualifications. Electronic portfolios extend this capability by enabling easy storage of documents in digital form, and tools for linking documents and reflections to create a coherent account tailored for a particular audience. This paper describes the development of an e-portfolio system for teacher education students.

The OLPC Laptop: Educational Revolution or Devolution?

Caitlin Bentley, Concordia Univeristy, Canada

The OLPC laptop launched in 2005 has been a sensational topic of conversation among computer engineers and scientists, development workers, and governments ever since. The OLPC organization views the laptops as a means to provide education for all, particularly in developing countries where children have limited access to schooling. However, the OLPC organization has not publicly supported this view with empirical evidence. A review of educational research was conducted to determine whether or not the OLPC laptop could potentially provide an education for children. It was found that yes, children could use the OLPC laptop to pursue an education, but this conclusion is by no means a guarantee. An implementation program that helps governments provide a curriculum, set up learning partnerships, and evaluate the laptop program is proposed.

The Technological Skills of Alternatively Certified Career Changers Bring an Added Dimension to the Employment of Prospective Teachers

Carla Bergdoll, Regent University, United States Minor Outlying Islands

Abstract: This study addresses the social and human benefits of employing alternatively certified teachers (ACT). Nineteen Liberal Arts College directors, twenty secondary public school principals, and 87 ACT were surveyed. This constitutes a population of post-baccalaureate non-degree licensure teacher preparation programs nationwide. The respondents reported general agreement regarding the following: (1) Principals and directors agreed ACTs are below average regarding the knowledge of the learning differences of their students; (2) all respondents agreed that the experiences of ACTs bring are invaluable; (3) all agreed that the technological skills of ACTs are benefits to the individual school and classroom; and (4) all respondents agreed there are significant contributions to society employing ACTs because they are a link between the school and local community in bringing societal needs into the education arena.

Beyond Classroom Comparisons in the "What Works in Distance Education" Question: A Meta-Analysis of DE vs. DE Comparative Studies

Robert Bernard, Phillip Abrami, Evgueni Borokhovski, Anne Wade, Rana Tamim, Mike Surkes, Edward Bethel, Concordia University, Canada

This is a meta-analysis of the experimental literature of distance education (DE) comparing different instructional treatments with each other. A framework was developed around three major dimensions of DE: Student Interactivity, Student Autonomy, and Technological Functionality, and used to categorize studies for analysis. For example, Student Interactivity contained three categories of independent studies: those exploring Student-Student Interaction, Student-Teacher Interaction, and Student-Content Interaction. This allowed the effect size valences to be determined. Forty-five studies of achievement were included, yielding 107 effect sizes. There were 50 effect sizes for Interactivity, 25 effect sizes for Autonomy, and 32 effect sizes for Technological Functionality. Weighted average effects for the three dimensions were: $g+ = 0.089$, $p < 0.05$,

g+ = -0.104, and g+ = 0.055, $p < 0.05$, respectively. All distributions were significantly heterogeneous, suggesting caution in interpretation.

The Potentials and Pitfalls of Synthesizing Research Evidence to Guide Practice in E-Learning and Distance Education

Robert M. Bernard, Concordia University, Canada

Over the past decade or so a small cottage industry has sprung up in the educational technology community in which research evidence is synthesized (usually meta-analyzed) with the expressed intention of providing guidance to practitioners and/or policymakers. No fewer that 25 meta-analyses appeared in the literature during that period, each staking some evidential claim based on demographic (e.g., elementary students), media type (e.g., CBI), media function (e.g., CMI), outcome type (e.g., student satisfaction) or all of these (i.e., Bernard et al. 2004). While this trend corresponds to a growing worldwide demand for research evidence for use in the conduct of professional activities (e.g., health care), organizations such as the Cochrane and Campbell Collaborations warn us about the potential for harm rather than good in the development of research-based knowledge. In this presentation we will examine both the potentials and the pitfalls of performing research syntheses and relying on the guidance they provide. We will look at issues such as 1) the nature of the questions; 2) the meaning of systematicity in reviewing evidence; 3) the quality and quantity of available evidence; and 4) methodological limitations of review models. A case will be made that quality systematic reviews are the very backbone of evidence-based practice and that nothing less will provide a credible future for the progress of e-learning and distance education. The systematic review team (myself, Phil C. Abrami, Richard F. Schmid, Anne Wade, Evgueni Borokhovski and doctoral students) at the Centre for the Study of Learning and Performance (CSLP) at Concordia University conduct systematic reviews, including meta-analyses, on all aspects of technology integration in education, distance education and e-learning.

The Effects of Ubiquitous Computing on Student Learning: A Systematic Review

Edward C. Bethel, Robert M. Bernard, Philip C. Abrami, C. Anne Wade, Concordia University, Canada

As technology use in education increases, interest in and implementations of ubiquitous computing initiatives have also increased. One-to-one laptop initiatives have sprung up throughout North America at the school, district, and state or province levels. This paper is an attempt to synthesize available studies of one-to-one initiatives at the K-12 level using both quantitative and narrative techniques. It is hoped that by so doing, best practices of these types of implementations can be identified.

CoRe – Linking Teaching and Research by a Community-Oriented Strategy

Marco Bettoni, Willi Bernhard, Swiss Distance University of Applied Sciences, R&D Dept., Switzerland

The aim of this paper is to introduce the concept of a “community of research” (CoRe), a knowledge network of academic staff and students organized as a community of practice. The CoRe network is being developed within the context of a community-oriented strategy for the integration of teaching and research at the Swiss Distance University of Applied Sciences. We will first present the reasons and objectives of the CoRe project, secondly describe the seven basic elements of our design of CoRe viewed as a social structure, thirdly sketch the early stages of implementation of this design, fourthly present the online collaboration platform supporting interactions among CoRe members and finally derive some of the major implications that CoRe is expected to have on the linking between teaching and research.

Theories of elearning

Madhumita Bhattacharya, Massey University, New Zealand

Theories of elearning are not the extension of the theories of learning. Theories of learning are definitely valid in the elearning context too. Elearning theories are still being researched on. Elearning theories need to be dynamic and flexible to cope with the constant change. In this panel we will discuss those emerging and dynamic theories of elearning where people will get together and discuss to theorize elearning. We will argue about the theories such as framing theory (Hallanhan, 1999), connectivism (2005), transactional distance theory (Moore, 1993) and more as theories of elearning.

Managing a Successful LMS/LCMS Implementation

Billy Biggs, General Physics, Corporation, USA

There are major differences between the functionality of a Learning Management Systems (LMS) and a Learning Content Management System (LCMS). An LMS primarily focuses on competencies, learning activities, and the logistics of delivering learning activities. An LCMS focuses on creation, reusability, management, or improvement of content. The integration between the 2 systems is quickly becoming a key component to meeting all of an organization's learning and training needs. Integration helps with reduced maintenance costs and meeting all of the organization's learning needs.

Using E-Learning with The Reluctant Graduate Student

Barry Birnbaum, Northeastern Illinois University, USA

This session will focus on how to reach the reluctant university student who has little or no experience with technology as well as those who are afraid to use it. A discussion of the development of a course in e-learning will be provided as will strategies for modifying it to address the needs of these learners.

Higher Education Through Electronic Learning: Preparing High Quality Teachers through an On-line Supported Program

Carolyn Bishop, Christopher Foster, CalStateTEACH, California State University Fullerton, USA

The presentation will address questions related to high-quality teacher preparation through an alternative certification route in an online supported learning environment. Specifically, the presentation will highlight the structure of CalStateTEACH, a centrally-administered, online supported alternative teacher preparation program through the California State University System. In addition, data of program graduates’ preparedness, as reported by both students and direct supervisors, after their

first year in a fulltime teaching position, will be presented in a comparative nature with traditionally prepared, on-campus, students. Limitations and strengths of online supported teacher preparedness, through alternative certification programs, will be addressed. Specifically, the structure of an existing online supported program will be explored.

Cousins Virtual Jane and Virtual Joe, Exceptional Students

Seugnet Blignaut, Tshwane University of Technology, South Africa; Lynette Nagel, University of Pretoria, South Africa

Higher education institutions deliver web-based learning with varied success. The success rate of distributed online courses remains low. Factors such as ineffective course facilitation and insufficient communication contribute to the unfulfilled promises of web-based learning. Students consequently feel unmotivated. Instructor control and in the courseroom further isolates students, whereas success rate increases when students unite in virtual communities. King (2002) increased student participation in his online classes by creating a virtual student, Joe, as a participating student and supplementary facilitator. Our investigation responds to King's call for further directions on how a virtual helper enhances online facilitation. This inspired our investigation of how Virtual Jane might augment online facilitation. King's prediction, "It seems that Joe Bag may have a family in the future," (p. 164) became a reality in a South African masters' web-based class on web-based learning.

Learning to manage dementia in the healthcare setting through elearning

Diane Bouchard-Lamothe, Lynn Casimiro, Manon Tremblay, University of Ottawa - CNFS, Canada; Remi Rousseau, Univeristy of Ottawa - Eleraning center, Canada

SCO Health Services in Ottawa received funding from Canarie inc. to develop a series of four French and English online modules on how to deal with difficult behaviors in patients with dementia. They found that the time needed to create partnerships, come to a consensus on content and administrative tasks associated with managing the project took precious time away from the actual design, development, and delivery of the online project. Nevertheless, the elearning program was a success and a number of recommendations were made to improve the modules. Once the project was completed, the SCO collaborated with the Consortium national de formation en santé (CNFS), an original partner in the dementia project to revise the elearning program. This presentation will outline the changes that were made to the modules, the timeline that was followed, and the innovations in pedagogical design. The CNFS will share lessons learned and learner satisfaction data.

Collaborating On An E-Learning Course: Focus on Authentic Learning

Barbara Boyer, Susan Sgroi, California State University, Los Angeles, USA

This paper is a report of an e-learning course which resulted from the collaboration between a government agency and a university team of students and faculty. This paper's focus is on the production of an e-learning course and it's relationship to authentic learning. Such areas as content management, interface design, team collaboration, and government-university partnering were described. Through this project the student team became constructively involved in their own learning and acquired in-depth experiences in collaborative learning.

Designing and Implementing ICT Supported Learning Scenarios: Proposal for a Pedagogical Tool

Caroline Brassard, SADC Lac-Saint-Jean-Est, Canada; Amaury Daele, University of Fribourg, Switzerland; Liliane Esnault, EM-Lyon, France

The global context of innovation propels the trainers from a class lecture to a whole activity of pedagogical design and implementation. One of the key point of interest is the question of how to "scenarize" teaching and learning activities when using ICT. Designing a pedagogical scenario is answering a series of pedagogical questions related to the increasing complexity of the trainers and learners tasks due to the use of technologies. The purpose of this paper is to present a model and a tool based on the Reeves' model for supporting lecturers' in making pedagogical choices. The model and the reflexive tool were developed mainly in a research environment. They were experimented with "real" trainers in several workshops, experiencing situations taken from the "real life". Nevertheless, it was necessary to experiment on a larger scale to assess the practicality and efficiency of the system. The paper describes such an implementation involving learning trainers in adult education.

A Framework for Assessing the Pedagogical Utility of Learning Management Systems

Sharon Bratt, Simon Fraser University, Canada

This paper presents a framework for the development of tools for the assessment of learning system utility in a pedagogical context. This framework is based on both a general and a domain-specific model of system acceptability, and is illustrated through the instantiation of the framework for instructional designs requiring e-Learning tool support for self-regulated learning concepts. The assessment tool is intended for use by individuals or teams designing instruction for delivery through an existing learning system, or for the use of individuals or teams in selecting such systems. As a foundation, a conceptual framework for pedagogical utility will be established. Embedded in this construct is a theory-based framework for the design of a tool to assess learning management systems based on the system's pedagogical utility. The framework also addresses the limitations of existing models. This paper concludes with a description of the research in progress.

Technological Abuses in At-Risk Youth Populations

Wanda Briggs, Johnny Sanders, Jr., Winthrop University, USA

Technology and the Internet's social penetration is evident in the lives of today's youth. On the one hand, the digital era offers extensive communication avenues throughout the world; on the other, it may create heightened risk of communication disconnect, social anxiety, depression, addiction, and other dysfunctional behavior. The magnitude and direction of technological change and the Internet's impact on the physical, psychological, and social functioning of youth is an emerging challenge for parents, educators, industry, and helping professionals alike. Clearly, the interaction between dysfunctional human behavior, technology, and Internet usage trends are particularly disturbing for youth who are

navigating through developmental stages related to identity and psychosocial functioning. Participants will receive a critical review of relevant research and empirically driven guidelines for helping youth use technology safely and constructively.

Implementing Leaner-Care for 21st Century E-Learning

Anne-Marie Brinsmead, Ryerson University, Canada

Our being nimble and innovative as learning providers in terms of online delivery and pedagogy are not unimportant if we are to engage successfully and consistently in practices that are truly adult learner-centered. Listening to our students and acting upon their top requests result in our online programs' being tailored through the efficient use of educator-learner telephony to respond to learners' needs which include providing one-on-one support over and above learner expectations to assure that they succeed in achieving their goals. Offering telephony between learner and educator, complete with 'rigour and engagement parameters' and the implementation of critical path processes in our academic administration units, will increase learner satisfaction rates, enrolments and online course tuition revenues while responding to adults learners satisfaction level requirements as well as their individual needs, part-time university degree completion schedules and busy lifestyles.

Finding Learning Objects: an Advanced Search Service based on Tracking Data

Julien Broisin, Philippe Vidal, Université Paul Sabatier - Institut de Recherche en Informatique de Toulouse, France

Current systems used to search for learning objects stored within learning object repositories do not offer the opportunity to easily retrieve resources appropriated to a specific pedagogical context. To tackle this issue, we present in this paper an advanced search service dedicated to learning objects that improves common search systems by identifying and classifying, according to some criteria specified by the course designer, the resources that suit the best his learning context. These criteria are related to (1) learning objects' statistics, (2) the courseware being elaborated, and (3) tags and comments associated to resources. A scenario together with an implementation allowing for cooperation between an existing search service and the advanced service are then presented and validate our approach.

Considerations for Interviewing MMOG Players Avatar to Avatar: the Experiences and the Data Reviewed

David Brown, William John, Joseph Schlesinger, Victor Tardiff, Daniel Tyler, Maine School of Science and Mathematics, USA

Abstract: This study investigates the process and results of surveying MMOG players in-game, that is avatar to avatar. It is believed that the technique of in-game interviews and surveys will elicit a more robust response than out-of-game surveys. Five researchers constructed the survey with four administering over several weeks. A standardized protocol, delivered through copying and pasting into the World of Warcraft™ "whisper" mode, elicited information. Responses from players (n=164) were recorded in a chat log and then parsed for analysis. Data were analyzed at ($p < 0.05$).

Designing a Study Abroad Program Using Technology to Foster Transformative Learning

Kenyon Brown, University of Georgia, USA

This paper presents an instructional design model for the establishment and administration of study abroad programs. The model incorporates several key aspects of Mezirow's theory of transformative learning and discusses how technology-enhanced communication can encourage and/or enhance the transformation process. An explanation of the model guides the practitioner through the entire study abroad process including learner pre-assessment, goal identification, location selection, technology resource assessment, establishment of communication guidelines, communicative exchange, and learner post-assessment.

Are Technology Challenges in the Workplace A Matter of Diversity?

Shelia Brown, Strayer University, USA

The need for proper training and educational devices in the workplace should be a major concern. Many employers offer educational assistance to its employees but is this enough. Are all needs being addressed? Who are the technologically challenged in the workplace? Are these challenges of diversity or is there more going on which has not been addressed? This paper will seek to address the issues of employees working in positions which they may not qualified and due to new guidelines at those organizations are now being pushed out of those positions to allow more experienced and technologically advanced to enter into those areas of employment. Evaluates the impact of knowing how to use various technologies such as e-mail, office suites, intranets, Web marketing, customer relationship management, virtual offices, automation and virtual teams. Discusses he implications of these relationships and how they will affect corporate America today and in the future.

Technology in Higher Education – Dimensions of Value from a Student Perspective

Christine Bruff, Alison Dean, Bruce Cheek, John Nolan, The University Of Newcastle, Australia

Focus groups and a survey were used to explore the understanding and priorities of university students in various demographic groups with respect to the value of electronic delivery of education. Most of the available technologies were reported to be useful, but there were some variations between student groups. Some demographic differences were also reported in the values ascribed to various benefits and costs associated with use of technology. Flexibility in study time, place and method were not strongly endorsed as benefits but there were some differences between groups. Students indicated a relatively high overall value for on-line educational delivery; provision of resources was the most highly valued feature, and reduced interaction with instructors and fellow students most detract from its value.

Extreme (Class) Makeover: Engaging Information Literacy Students with Web 2.0

Korey Brunetti, Lori Townsend, California State University, East Bay, University Library, USA

Capitalizing on students' enthusiasm for Web 2.0 tools, two librarians at a diverse, urban university sought to bridge the gap between surfing MySpace and navigating information-rich academic environments. This session will showcase a unique approach to teaching information literacy alongside emerging technologies. Using tools such as blogs, RSS, and social tagging to bolster key information literacy concepts, two teaching librarians redesigned a traditional, classroom-centered

course for a web 2.0 world. An analysis of successes and setbacks will be featured, including student responses and survey data, along with strategies for helping students overcome tech-anxiety. Educators and trainers curious about applying web tools to instruction will gain practical tips and insights.

Personalized E-Learning for Distance Courses in Community Colleges

Peter Brusilovsky, University of Pittsburgh, USA; Nancy Grant, Community College of Allegheny County, USA; Sharon Hsiao, University of Pittsburgh, USA; Kenneth Moore, Community College of Allegheny County, USA; Sergey Sosnovsky, University of Pittsburgh, USA

Personalized E-Learning systems have a potential to advance distance learning education to a new level. The evaluation of several personalized E-Learning systems in the context of regular classes offered by top research universities and teaching colleges demonstrated their ability to increase both quality of learning and student motivation to learn. However, the usability and the value of personalization, which adds another layer of complexity to E-Learning systems, is yet to be proved in the context of real distance learning courses offered by regular 2-year and 4-year colleges. The study reported in this paper explored whether the students enrolled in distance learning courses at the Community College of Allegheny County are able to use, understand, and appreciate several personalized E-Learning systems, which were not specifically customized for this category of students. The results demonstrate that some tools are used quite heavily, while other tools are used less than expected.

Student Acceptance of Web-based Simulated Patients for Assessment

Pauline Brutlag, Pat Youngblood, SUMMIT, Stanford University School of Medicine, USA; Jennifer Hayes, CHP/PCOR, Stanford University School of Medicine, USA; Maria Sandberg, Karolinska Institutet, Sweden; Andrew Nevins, Stanford University School of Medicine, USA; Nabil Zary, Uno Fors, LIME, Karolinska Institutet, Sweden; Parvati Dev, SUMMIT, Stanford University School of Medicine, USA; Neil Gesundheit, Stanford University School of Medicine, USA

During the last few decades there has been a significant shift in teaching methods in higher education, from a focus on facts towards a focus on problem solving, deeper understanding of principles, and critical thinking [Laurillard 2002, Marton & Booth 1997]. Corresponding assessment methods need to be developed to measure learning outcomes [Roos 2005]. Previous work shows great potential in web-based cases for valid, cost-effective assessment of clinical reasoning skills of medical students [Brutlag et al, 2006]. This paper examines student acceptance of a web-based simulated patient system, Web-SP, for assessment in medical education. Initial results show that student acceptance of this web-based assessment method is high, with greater acceptance in pre-clinical versus clinical students.

SECI, BA, ESCI and VAG – Linking Models of Knowledge Acquisition, ELearning and Online Immersive Worlds to Create an Innovative Learning Environment

Kim Bryceson, University of Queensland, Australia

This paper looks at how an ancient eastern philosophy (BA) and a knowledge creation theory that comes out of the corporate world (SECI), have been used as the basis for a successful online learning model for tertiary studies (ESCIE) and the ongoing development of an online virtual agribusiness supply chain simulation (VAG) to be used as a massive multiplayer online educational game. The key literature behind each of the models is briefly discussed before the major eLearning issues associated with the development of a virtual supply chain game in the Australian beef industry are discussed.

Assessing Electronic Portfolios -- Now that we have them, what can we do with them?

Eva Bures, Bishop's University, Canada; Philip Abrami, Centre for the Study of Learning and Performance; Concordia University, Canada; Caitlin Bentley, Concordia University; Centre for the Study of Learning and Performance, Canada

An approach to assessing electronic portfolios is developed working with two teachers and other experts, and the inter-rater reliability is explored. The assessment has two parts. First the teacher assigns holistic marks and comments to up to six categories: critical thinking, writing, comprehension, self-regulated learning, presentation, and progress. Second, the teacher uses a rubric with five of the six categories, excluding critical thinking. The teacher can choose the relevant parts of the holistic approach and rubric to apply. After the initial development of the tools, an iterative process of modifying these tools to build their inter-rater reliability occurred. There were four rounds, with major revisions to the tools after the first two rounds. The final round was of 66 portfolios at the grade 5/6 level each one coded by two of five coders. The holistic marks were difficult to agree upon, especially the ones for presentation, progress, and self-regulated learning.

Exploring Web 2.0 Tools and Their Applications for Education and/or Training: An Experience Report

Celina Byers, Bloomsburg University, USA

This paper describes the design of a master-level course on the new generation of Web 2.0 tools that can be utilized in education and training. The design applied Kolb's model of experiential learning, incorporating specific activities and structures devised to represent each of the model's basic elements: experience, critical reflection, abstraction, and active experimentation. A random sample of the tools the students investigated, as well as some of their suggestions, ideas, and production during the course, is provided.

The Use of Open Source to mitigate the costs of implementing E-Government in the Caribbean

Akilah Byron, Quinnipiac University, Saint Kitts And Nevis

The concept of E-Government is to provide an alternative means of accessing public services. It allows citizens to have easier access to governmental departments. It is through the use of Information and Communication Technologies (ICT) that these services are delivered. In the Caribbean specifically, E-Government, and its use of ICT's, is seen as a "potentially powerful tool to strengthen public reform efforts, to promote transparency and accountability, to enhance policy making and public service delivery, and stimulate more direct participation in the governing process" (Report of the Fifth Caribbean Ministerial Consultation, 2004. This paper investigates providing an alternative software solution that can aid the islands of

the Caribbean to successfully implement their ICT E-Government strategies through the use of Open Source Software and be more cost-effective

Flexibility Considerations of Adult Learners Taking an Online Course

Hasan Caliskan, Anadolu University, Turkey

The aim of this study is not to obtain statistically viable data in a quantitative manner but rather to focus on individuals and their personal experiences and approaches to flexibility and related concerns in their faculty development program in a qualitative manner. A semi-structured interview method will be used for data collection on a randomly selected group of attendants (faculty) of an online learning activity. What flexibility is in attendants' eyes, how flexible they consider their courses and program, how they think they are a part of the learning process in terms of design, activities, and evaluation process, how they evaluate the course in terms of online learning, online activities and interaction, how they evaluate their access to learning experiences provided will be among the semi-structured interview discussion topics.The results of this study may be useful in both designing more effective, efficient and appealing learning activities that provides learners with more flexible learning experiences and making well-informed decisions on the learning needs of faculty.

Oral language evaluation via the computer

Alan Cameron, University College of the Fraser Valley, Canada

Evaluation has always been an integral part of the teaching process. Learning outcomes can be set, but the teacher has to decide how well those outcomes are met, mostly by evaluating students on an individual basis. For language teachers, oral evaluation is problematic. Face-to-face interviews are the norm, but there are so many variables and constraints that consistent assessment is sometimes difficult. Using the computer as an instrument for oral evaluation can provide that consistency. A test taken on computer can reduce student anxiety and improve performance. I would like to demonstrate the innovative applications which we at UCFV have developed, and learn more about how others are using computers for second language oral evaluation.

Always have plan B: student response to an e-learning program under challenging conditions in China.

Anna Campbell, University of Canberra, Australia

Abstract: The delivery of offshore courses using both face-to-face and ICT enhanced learning activities can be a challenging experience for both students and lecturers. When such teaching includes the student's first contact with an integrated curriculum, exposure to relatively unfamiliar learning/teaching approaches, an earthquake and an unexpected failure of the technology, the ability to quickly adapt to the local circumstances is essential. Although the benefits of IT enhanced learning have been well documented (Herrington & Herrington, 2005), a major fear among many academics operating in an e-learning environment is the possibility of technological failure, especially if this occurs in an unfamiliar cultural environment where IT support staff is not available and/or does not speak English. But from such challenges inspiration can grow. Using the example of a case study set in China, this paper explores the benefits of adapting e-learning to the circumstances.

Doing More with Less: An Alternative Training Approach to Systems Training

Annette Cañeda, Telecare Corporation, USA

This paper presents an alternative approach to delivering systems training, using a combination of instructor-led and e-learning methods at a medium-sized mental healthcare company. The approach has proven successful after only one year of its implementation. Learner retention and development are highlighted and organizational performance is discussed.

E-therapy: preliminary results on clinical skills teaching.

Georgina Cárdenas-López, Lorena Alejandra Flores Plata, Berenice Serrano Zarate, Universidad Nacional Autónoma de México, Mexico

The current work describes the development, implementation and evaluation of the program Online Psychotherapy: An alternative for professional education that consist of three semesters during which it is provided a practical training scenario for the clinical formation of seventeen therapist-students, providing, after the second stage, cognitive-behavioral treatments via Internet to the university community with anxiety disorders and mild to moderate depression. The service is provided from a computerized platform that administers the psychological services via Internet, such software stores the patients' data, the tools and materials required during the therapeutic process. As part of the training the therapist-students attend to professional clinical supervision; they were also evaluated after three and six months. The results of this initial stage show a significant learning.

Education Trump Cards: Technology or Pedagogy?

Greg Carroll, Allan Shwedel, Salem State College, USA

In the past ten years the integration of Information Communication Technology (hereafter ICT) has had as its central justifications the increased academic achievement and the keeping up with world class standards. ICT, however, has also been seen as a means to broaden critical emancipatory horizons and transform the context of teaching learning. This paper uses insights from a regional collaboration between school districts and higher education to examine the interplay between ICT and pedagogy. While ICT has been talked about as a tool that teachers have to be more skillful at using. It is the position of the authors that it is not just questions about skill, but rather questions about WHY and WHAT FOR that need to be continuously examined, and re-examined. Just making teachers better at using ICT is a necessary but far from sufficient condition for meaningful improvements in teaching and learning, or increases in academic achievement.

Looking for a Model to Structure Learning Objects: MPLO (Multiple Perspectives Learning Objects)

Ana A. Carvalho, University of Minho, Portugal

This paper describes a model to address the development of learning objects based on Cognitive Flexibility Theory and on research related to this theory. We called this model Multiple-Perspectives Learning Objects (MPLO). The model integrates three components: a case and its background context, a brief description of the perspectives used to analyze the case, and the deconstruction process that promotes deep understanding of the content analyzed. Some models for structuring learning objects are reviewed but none of them is based on a learning theory.

Designing an E-learning Experience to Stimulate Interprofessional Practice in Health and Social Care

Lynn Casimiro, University of Ottawa - CNFS, Canada; Colla Jean MacDonald, University of Ottawa - Faculty of Education, Canada; Rémi Rousseau, University of Ottawa - Centre for E-learning, Canada; Diane Bouchard-Lamothe, Univeristy of Ottawa - CNFS, Canada; Manon Tremblay, Lucie Couturier, University of Ottawa - CNFS, Canada

Health and social care providers are expected to work collaboratively with patients and community partners, to deliver efficient health and social care. Yet each discipline has its own distinct body of knowledge and discipline-specific training which leads to professionals who don't necessarily understand how to work together efficiently. It is within this context that the Consortium national de formation en santé (CNFS) designed, developed, delivered, and evaluated an e-learning continuing education program to train interprofessional champions across Canada. These champions can then act as role models and help stimulate interprofessional practices in their workplace. The French-language e-learning program examines the concepts of interprofessional practice and then brings learners to develop an action plan based on an individualised conceptual map. Study results show that e-learning is a desirable approach to interprofessional education (IPE) and that course workload must be carefully assessed, communicated and managed when offered in a not for credit continuing education context.

Computer simulation of historic spaces: a case study

Airton Cattani, Federal University of Rio Grande do Sul, Brazil; Asdrubal Antoniazi, Jacqueline Pedone, Ana Elisia Costa, Anselmo Guareze, Caxias do Sul University, Brazil

Computer simulation is an important learning tool for architecture, both for assessing projects and for investigating historical data. This study presents the initial results from research into computer simulation of historic spaces using SketchUp software and 3D Studio Max 8. The results discuss the viability of this kind of resource in studies of historical heritage, while at the same time consolidating learning procedures in virtual environments.

Emotional Retention Agent for Foreign Language E-Learning

Pierre Chalfoun, Ilusca Lima Lopes De Menezes, Claude Frasson, Département d'informatique et de recherche opérationnelle, Canada

Learning a foreign language is often a fun but difficult task. A variety of commercial and non-commercial products focused on multimedia content claim to being the perfect vocabulary teacher. However, these products take neither care about the individual differences nor the emotional states that occur in the learning process. In fact, each individual learns in a different way and expresses a different range of emotions during that cognitive process. In this paper, we present an emotional retention agent for the learning of a foreign vocabulary language, namely Portuguese. This agent teaches the words by associating the best adapted hints to the learner's learning style. We present its architecture and discuss the results obtained in an experiment.

Implementing Web 2.0 Technology for ELearning Systems

Tom Chan, Southern New Hampshire University, USA

The Time magazine honored "You", citizens of the new digital democracy, as the Person of the Year for 2006. Behind popular terms such as blog, wiki, social networking site and streaming video are a new generation of Internet technologies collective known as Web 2.0. While it is easier than ever to enhance web experience, embedding the new technologies successfully in e-learning systems requires careful planning and implementation. Selecting a proper Web 2.0 framework is crucial for success of the project. Common frameworks include Flex, AJAX, and AJAX with various programming languages; and each framework has different capabilities, development challenges and support levels. Apart from building the application, security will be the number one concern for Web 2.0 technologies. The adoption and deployment will be a slow process. Technical issues aside, user's attitude and organizational culture are also crucial in the successful integration for Web 2.0 technology into the school's infrastructure.

The Effects of Writing Reflection Journal on Student's Motivation and Learning Outcomes in Blended Learning

Eunho Chang, Sungho Kwon, Jiyeon Yoon, Hanyang University, Korea (South)

The purpose of this study is to discover whether the writing of reflection journals will increase learning motivation and learning results in blended learning. This study starts from recognition of whether the support of reflection journal can show better results in learning motivation and learning result. The study of reflection journal was largely made on web-based learning of the past. Many existing studies have been conducted in which blended learning showed better effects than web-based learning. The theory on reflection which had actively been made on web-based learning was being materialized by writing reflection journal. This study has tried to find what effect the writing of reflection journal has an effect on the learning motivation and learning result.

Caring Relationships in an on-line collaborative learning

Hyeseung Maria Chang, Shih-Ting Lee, The University of Texas at Austin, USA

To understand on-line collaborative learning based on an ethical view and a relational view, this paper presents students' caring relationships in computer supported collaborative learning course at the graduate level. As well, this paper offers the criteria for using the caring construct to explain a Computer Supported Collaborative Learning environment. Both

instructors and students in a Computer Supported Collaborative Learning course at the graduate level could experience effective and satisfactory learning within the caring relationships.

Students' Trust Relationships in a Computer Supported Collaborative Learning (CSCL)

Hyeseung Maria Chang, Shih-Ting Lee, The University of Texas at Austin, USA

This paper presents students' trust relationship in a computer supported collaborative learning (CSCL) environment. Comparing with the trust relationship in the computer supported collaborative work (CSCW), to understand the trust relationship in the CSCL; we will report various students' perceptions on the trust relationship. Using the grounded theory approach, this paper also discusses how do different types of CSCL tools impact on building trust relationships and how do students' perceptions on trust relationships influence their collaborative learning process in a CSCL course at the graduate level.

Social Computing on Online Wayfinding Training for Individuals with Cognitive Impairments

Yao-Jen Chang, Chung Yuan Christian University, Taiwan; Tsen-Yung Wang, National Yang Ming University, Taiwan; Shih-Kai Tsai, Yen-Yin Chu, Chung Yuan Christian University, Taiwan

A wayfinding training system is presented with an aim to increase workplace and life independence for cognitive-impaired patients such as people with traumatic brain injury, cerebral palsy, mental retardation, schizophrenia, and Alzheimer's disease. It is based on geo-coded QR codes which embed the coordinate (x, y, floor) and social computing that helps shorten the learning curve for the people who use it. According to psychological model of spatial navigation and the requirements of rehabilitation professionals, PDAs prompting with spatial photos at the right time and place can assist cognitively-impaired persons with navigating indoors or on the road. The experimental results show the computer-human interface is friendly and the capabilities of wayfinding are reliable.

Policy Evaluation on Technology Integrated Instructions of Junior High Math and Science Teaching in Taiwan

Tsung-Hau Jen, Science Education Center, National Taiwan Normal University, Taiwan; I-Chia Chao, Policy Research, Evaluation, and Measurement Program, University of Pennsylvania, USA

Data of 6,150 math and science teachers nested within 681 junior high schools was drawn from 2003-2004 Taiwan School and Staffing Survey, conducted by Science Education Center of National Taiwan Normal University. Multilevel logistic regression was adopted to examine the effect of policy that provides inservice trainings for teachers to learn technology integrated instructions from both individual and institutional perspectives. At the individual level, results revealed that teachers who have ever participated in training activity adopted the technology integrated instructions significantly more than who have never attended training in the past three years. At the institutional level, result identified the contextual effect of schools' inservice training participation rates being a powerful predictor. Suggestions are recommended for educators and policymakers to make influential strategies at both individual and contextual level to change teachers' technology integrated instructions.

A Multi-State Online Teacher Certification Program

Sharon Chaplock, Heidi Schweizer, Carrianne Hayslett, Marquette University, USA

The enormous demand for new teachers has created a need to extend teacher certification and post-baccalaureate degree programs to a larger audience. Placing a program online, an effective means to reach such an audience in many fields, is a more complicated process for teacher preparation given the need for practical experiences to accompany coursework, and state-by-state differences in teacher certification requirements. This best practices presentation provides three important areas of guidance based on the development and successful implementation of such a program. First, it will detail the elements of effective online teacher certification. Second, it will specify the process by which three universities shared technology and resources to develop this multi-state teacher certification program. Finally, it will outline the process by which this program provided students both online and practical experiences to meet certification requirements.

Knowledge Gap, Digital Divide & Distance Learning

Christine Chelus Kroll, State University of New York at Buffalo, USA

While the Internet has the potential to provide users, most specifically high-speed bandwidth users with new and ever-changing opportunities, it also has the potential to isolate dial-up and non-users. Those traditionally found at the lower end of the knowledge gap are fast becoming the same groups now found at the lower end of the digital divide. This paper is a report on the findings of a dissertation study titled access, assessment, and bandwidth: high speed internet access and distance education. Using a homogeneous class of graduate students enrolled in an online course, the study found that students with high-speed internet access had both increased levels of participation and higher final grades than students using dial-up access. Differences found in groups such as this, small, homogeneous, well-educated, and computer-experienced create a compelling basis for future study of heterogeneous groups at various levels of academia (PreK-16).

Wikis e-Learning portal: a new Web-based tool for virtual collaborative education

Chun-Yu Chen, Wei-Shuo Lo, Department of Business Administration, Mei-Ho Institute of Technology & ITE,NKNU, Taiwan; Hui-Chin Su, Graduate Institute of Business Management, Mei-Ho Institute of Technology, Taiwan

This research presents an e-Learning platform using Wiki technique. The Wiki technology is presently the hot issue of on-line technologies. This paper describes a Wiki-based e-learning design, implement, and instruction, which discover the effectiveness of Wiki mechanism in online environment. This Wiki e-Learning system includes six levels: user level, tool level, homepage interface level, Wiki interactive level, Wiki model level, and database level. Moreover, Wiki function covers the basic editing, reading, management, index, RSS, and version control. The learning platform with version control would not only provide knowledge acquisition channel for learners, but also enhance learners' interaction through

collaborative writing, knowledge database, and structured searching index. This paper interprets the results of students' interaction, knowledge sharing, and learning achievement in this Wiki-based eLearning enviornment.

Self-determination Theory: Implications for Motivation in Online Learning

Kuan-Chung Chen, University of Georgia, USA

Despite the fact that many motivation theories have been applied to online learning research, self-determination theory (SDT) was generally overlooked in this line of research. This paper discussed SDT's implications for online instruction. It is hoped that this paper will stimulate further research on testing the tenability of self-determination theory in online learning environments, as well as developing SDT-based instructional strategies that facilitate motivation in online learning.

Hybrid Course Development: Best Practices for Avoiding Potholes, Roadblocks, and Steering Your Course in the Right Direction

Muriel Cherry, Towson University, USA

At many colleges and universities today, it is common to find hybrid courses offered as part of the institution's curriculum. This presentation describes the experiences of a graduate teaching assistant in the development and implementation of hybrid courses using Blackboard. Important lessons learned in transitioning traditional face-to-face courses to a hybrid model will be discussed as well as best practices in course design.

Teacher Education in Assistive Technology - Innovation and Accessibility On-line

Linda Chmiliar, Athabasca University, Canada

In today's inclusive classrooms there is an increasing demand on teachers to implement assistive technology supports for students with special needs. Assistive technology is any tool or device that assists students with disabilities to participate in the classroom in ways they would not normally be able to without the tool. Assistive technology tools range from simple devices such as pencil grips, and raised line paper to advanced technology such as adaptive software. Typically, teachers do not receive training in assistive technology at the preservice level, and are not equipped with the skills or knowledge to meet this demand. Athabasca University has developed a unique online distance course in Assistive Technology to provide an opportunity for teachers and other educational professionals to engage in professional development in this area regardless of their geographical location. This paper will discuss the development and features of this innovative course.

The Performance Model of English E-Learning- An Example of Using MP3

Frances Choi, HungKuang University, Taiwan; Chia-ling Chiang, Tunghai University, Taiwan

The ways to inspire students' motivation on E-learning has been improving. Without a proper approach, E-learning may bring adverse effects in the long run. This study utilized a lightweight E-learning tool called MP3 in order to attract learners and upgrade their English listening comprehension. This project established a channel for linking the various multimedia-based English listening resources on web sites that students themselves can legally download contents on a regular basis. Students listened to the downloaded material off-line in a free style. Twenty-eight college students have volunteered to participate in this pioneer program using quantitative and qualitative paradigms. In addition, 50 students joined each test as the control group for comparison purposes. Three learning performance models were proposed and most students attributed themselves to a linear growth learning patterns. Results also showed that an MP3 is a good tool and students have more resources to self-assess their English language ability.

Telecollaboration between instructors: a pedagogical innovation to revitalize technical programs with small cohorts

Martine Chomienne, SOFAD, Canada

Many technical programs offered to small cohorts score below the viability threshold. This situation has consequences for the students and their instructors. The instructors find that their task becomes increasing difficult, and questions are raised about the diversity of learning and resources offered to the students. The concept of a "cégep network" would allow colleges to restructure the way these programs are offered. The project brings together students and instructors from five programs in 11 cégeps in an exploratory action-training study. The CBAM model (concerns based adoption model) was chosen as the principal theoretical framework. The results demonstrate that synchronous environments made available to the instructors were adopted to support the work of the instructor teams and conduct learning activities. A variety of factors conducive to telecollaboration were also discovered, with pedagogical harmonization between the instructors being an essential condition.

Comparison of Motivation Factors in the Participation of Networked Learning between American and Asian Students

C. Candace Chou, University of ST. Thomas, USA; Chi-Syan Lin, National University of Tainan, Taiwan; Mark van 't Hooft, Kent State University, USA; Yi-Mei Lin, National Chung Cheng University, Taiwan

This study examines the motivation factors among ESL students in Asia and K-12 students in the United States. Interestingly, there are more similarities than differences in the motivation factors in both groups of students. The main factors that motivate students in participating in network learning are: community, learning, literacy & technology, and communication. ESL students enjoy practicing English through networked learning environment and American students find it beneficial to enhance global cultural understanding through ACA projects. Collaboration projects that are based on the mutual interest between the native speakers and ESL students are the key to successful partnership.

The affects of progress reports and goal orientation on effort and achievement in an online individualized E-learning program

Roy Clariana, Penn State University, USA; Ray Bernardi, Wyoming Area School District, USA

This investigation examined the effects on effort and achievement when parents are provided with a progress report of their child's work on online computer-delivered lessons. Effort consisted of the number of online lessons completed and

achievement consisted of the end-of-year state-wide assessment (PSSA). Eighth grade students' (n = 194) completed online CompassLearning mathematics and language arts lessons delivered in a web browser over the internet. Results show that all students performed exceptionally well on the PSSA relative to comparable student populations (i.e., 24% free or reduced lunch), with 93% of students obtaining Proficient or Advanced levels in Reading and 85% obtaining Proficient or Advanced in Mathematics. The report group tended to score a little better than their comparable no report group. However, females with a performance goal orientation whose parents received the progress reports completed significantly fewer computer-delivered lessons relative to the other groups. The implications of these findings are provided.

The Relationship of Selected Characteristics on the Perceived Technological Knowledge of E Faculty

Myriah Clark, Louisiana State University, USA

This study investigated the technological development of e faculty at five randomly selected Carnegie classified (2006) Doctorate-Granting Research Universities with very high research activity (RU/VH) in the Southern Regional Education Board (SREB). Findings indicate that as technology anxiety decreases and self efficacy and perceived level of support increase, the perceived technology knowledge of e faculty increases. Three variables, technology anxiety, self-efficacy and perceived level of support, explain over half of the variance in the perceived technology knowledge of e-faculty.

A Re-conceptualized Model of Good Online Pedagogical Practices

Shelley Cobbett, Dalhousie University, Canada

Online learning is a primary part of the globalization that is affecting the world economy. Chickering and Gamson's (1987) Seven Principles of Good Undergraduate Practice have documented application but there were no studies found that examined analytically the groupings of the indicators/activities that comprise the Seven Principles. Ninety-two nurse educators from across Canada completed a quantitative survey that addressed activities included in the Seven Principles followed by in-depth focus groups linking good, online pedagogical practices with online teaching experiences. Chickering and Gamson's Principle groupings were not confirmed during a factor analysis. Five underlying components emerged from the analysis, communicative learning, student, teacher, informed confidence, and knowing and sharing, which comprise a re-conceptualized model of good online pedagogical practice. Further testing and use of the model within an online learning environment is warranted.

Real Communities vs. Virtual Communities - Structural Adaptations of a Learning Management System

Luigi Colazzo, Francesco Conte, Andrea Molinari, Nicola Villa, University of Trento, Italy

The paper presents our experience as projectionists, developers and administrators of an e-Learning system based on the metaphor of virtual learning communities. The system originally conceived as an auxiliary instrument to blended didactics of our faculty has, subsequently, been extended to other experiences (especially to applications of life-long learning). This change has highlighted how a software system of this kind needs to manage in a different way the general organization of virtual communities. In the paper we will analyse the nature of the change the system had to undergo following its extension to greatly different learning environments.

Learning from our students: Using Electronic Portfolios for Accreditation and Student Evaluation

Robert Cole, Saint Louis University, USA

Abstract: The Department of Elementary and Secondary Education (DESE) of Missouri had required that portfolios be used to evaluate teaching candidates' knowledge, skills and dispositions for recommendation of certification since 1998. In 2003 the Department of Educational Studies in the College of Education and Public Service at Saint Louis University made the commitment to change the format of the portfolio from a large physical binder to an electronic format. In the spring of 2007 during a meeting to address our upcoming National Council for Accreditation of Teacher Education (NCATE) accreditation visit, the faculty decided that we would also use an electronic portfolio to structure our reports and exhibits.

Assessment and Learning: Applications in the Online Classroom

Patricia Comeaux, University of North Carolina at Wilmington, USA

This paper provides a brief review of the relevant literature on learner-centered paradigms and assessment. In addition, it delineates the integral relationship between assessment and learning. In addition, the benefits of online learning and assessment are articulated. This paper also provides resources and strategies for assessing online learning.

Perspectives of Best Practices of Online Learning Strategies and Implementation

Patricia Comeaux, University of North Carolina at Wilmington, USA

This presentation will provide an overview of my perspectives from a variety of experiences of implementation strategies for online learning. Focusing on the College of Arts and Sciences at XXXX university and from my perspective as a professor, I present representative online courses from fully online to blended courses. Drawing on my experiences as an editor of two books on online learning and a consultant in distance learning, I outline the benefits and drawbacks of teaching and learning online. In addition, I provide recommendations for community colleges or universities to consider as the implement or expand their online learning program.

Supporting Mac Faculty in a PC world

Kerrie Conover, Romana Hughes, Texas Christian University, USA

This presentation describes how the Koehler Center at Texas Christian University began a Mac initiative that would support both Mac and PC faculty equally. TCU eLearning department identified six areas of improvement for our Mac users to improve classroom teaching. Over a period of three years, results from follow-up meetings with Mac users found that our Mac users were not fully utilizing their training. Issues our Mac users faced where our shared training lab was setup to only recognize the PC desktop computers in the lab and not allow Mac users to plug-in, forcing the Mac users to use a PC. Starting fall 2006 the Koehler Center implemented the initiatives. We now have a support structure for our Mac users. We

found that since our implementation, our workshop enrollments have increased, our Mac users are utilizing their computers in the classroom in new and unique ways.

Exploring online tutors' beliefs on feedback

Maria del Carmen Contijoch-Escontria, Universidad Nacional Autónoma de México, Mexico

This paper involves research related to the area of e-learning with particular reference to the topic of feedback. The study here presented is part of a PhD thesis that is being carried out in Mexico at the Foreign Language Teaching Centre at UNAM within the Distance Learning Program "Doctor of Applied Linguistics" from Macquarie University in Sydney. The objective of the study is to examine what online tutors believe about the role of feedback in an online course that purports a socio-constructivist view of learning. The methodology used in the study involves a mix-method approach (questionnaire and interviews). Results of the study will be shown and discussed in the presentation.

E-government for the disabled: service through text-to-speech and speech recognition technologies

Juan Contreras-Castillo, Ricardo Acosta-Díaz, Silvia Berenice Fajardo Flores, Norma Barón Ramírez, JRG Pulido, José Manuel García Quintero, Jorge Nezahualcoyotl Mendoza Gutiérrez, Luis Arturo Godinez Macías, Universidad de Colima, Mexico

E-government refers to the use of information technologies to provide services to citizens and residents of a country or state, and it has been implemented in several countries, promoting efficiency in processes which used to be time-consuming. In Mexico, e-government services are offered in kiosks, which are facilities where people use computers with access to official databases; however, little attention has been paid to the suitability of these kiosks for people with disabilities, who present mostly motor and visual limitations. This paper presents the results of a study conducted with three disabled people using text-to-speech and speech recognition technologies to access a prototype for an adapted e-government service. Issues on the use of these assistive technologies are reported for the different disabilities.

A new methodology for the classification of SCORM-compliant Learning Objects

Nicola Convertini, Vittorio Marengo, Michele Scalera, Agostino Marengo, University of Bari, Italy

Within the Osel.it Project (Open Source e-learning), the Chair of Computer Science of the Faculty of Economics of the University of Bari, organizes computer science courses in blendend mode, using the most diffused LMS platforms in the Open source environment.The growth of the learning objects used within the courses involved a crescent difficulty in the classification and in the retrieval, leading the research group to find new organization strategies. This work, after the explanation of the decision to adopt the faceted classification, proposes a method to use an XML dialect to implement the faceted classification within the LMS SCORM compliant platforms.

e-scaffolding: An epistemological framework for e-learning

Steven Coombs, Bath Spa University & MirandaNet Academy, UK

IT software learning systems that enable the user to transfer ideas and experiences into new conceptual knowledge is proposed by the author to be a knowledge elicitation system (KES), which defines the epistemology of an e-scaffold. The critical and creative thinking design rationale of an e-scaffold and the underpinning generic criteria of a KES will be shared with readers, in order that any IT learning system can be readily evaluated in terms of its user-friendly 'learnability' and reflective learning capability. Critical Thinking Scaffolds (CTS) have been applied as e-learning e-scaffolding tools to support practice-based research modules within the Professional Master's Programme at Bath Spa University in the UK.

Making sense of video data captured for qualitative research methodology

Steven Coombs, Bath Spa University & MirandaNet Academy, UK; Mark Potts, Salisbury High School, UK

This tutorial paper considers how video evidences can be captured and used to support action research fieldwork. This research project is part of a PhD study that aims to design professional development opportunities for teachers engaged in international education. The methodology adopts an autobiographical study undertaken from the perspective of a lead teacher operating as a participant action researcher. Evidence in the format of video and narrative commentary are to be captured throughout the period of this project. The problem is to be able to make sense of video data captured as part of the qualitative research methodology. In particular, the research methods include the recording of an autobiographical video diary, along with video transcripts of focus groups.

Learning 2.0: concepts and experiences with social networks and software

César Córcoles, Carlos Casado, Maria Antonia Huertas, Enric Mor, Ana-Elena Guerrero-Roldán, UOC, Spain

Knowledge society has brought new educational paradigms. E-learning arises in all educative contexts and levels with the use of information and communication technologies and massive access to internet connected computers. On the other hand, the fast development of social networking tools and web 2.0 technologies are producing an evolution of e-learning towards what is called a learning 2.0 paradigm. In this presentation we shall discuss the main technologies and pedagogical issues related to that new way of learning. We will also present some experiences of social network tools supporting e-learning at UXX.

From "Sticks and Stones" to "Emoticons and Text Messaging" Is 'Cyber Bullying' Embedded in a Culture of Entitlement Learning?

Elaine Correa, Medaille College, USA

From the playground to the cyber classroom it appears that subtle forms of "cyber bullying" have surfaced as part of a culture of entitlement learning, particularly in the context of on-line courses. In this paper I will examine preliminary responses to a pilot study on program satisfaction for graduate teacher education and certification students. The issue of 'cyber bulling' in the guise of academic learning was identified by students and faculty as a recurring theme in the

preliminary data collection. Consequently, the question of whether 'cyber bullying' is embedded in a culture of entitlement learning necessitated changes in policy and practice in response to inappropriate on-line communication.

Emerald InTouch for personal learning, research and collaboration

Paul Coyne, Emerald Group Publishing Ltd., UK

Emerald Group Publishing Limited has recently developed a web space and hosting service to support learning, collaboration and networking. Using emerging technologies such as blogs, wikis and RSS, Emerald InTouch enables users to create and join communities of practice, engage in reflective learning and collaborate with peers online. By focusing on the learner as opposed to the course, Emerald InTouch supports the bridge between informal and formal learning. We would like to present the InTouch platform, describe how we developed this service and demonstrate its applicability to a range of scenarios in an e-learning context.

Guided versus Exploratory Paths: Who Chooses Which Path and Why?

Amy Crook, Leslie Miller, Margaret Beier, Rice University, USA

To increase learner control, satisfaction, and knowledge construction, online learning programs can provide multiple pathways within modules. Users may prefer to view content in differing formats or sequences. In the current study, age, goal orientation, and prior knowledge are investigated as potential predictors of path choices differing in structure. Additionally, pathway choices are analyzed to determine if such choices may influence a user's learning for the material presented. Results indicate that experience within the interface affects path choice, and reasons for choosing a guided path are centered around learning while choosing the exploratory path is based on personality reasons.

The Online Small Group Analysis Technique: Formative Assessment for Teaching and Learning

Robert Crow, John LeBaron, Dixie McGinty, Western Carolina University, USA; Ieda Santos, University of Warwick, UK

The purpose of this report is to describe a newly developed investigative technique – the recently-piloted, seven-stage Online Small Group Analysis (OSGA). While the basic tenets of the time-proven Small Group Analysis remain, it has become necessary to add three additional components and adapt the original model to suit specifically the online learning environment. The aim of this report, therefore, is to share with practitioners in other institutions this formative model used for assessing the efficacy of online teaching and learning.

Accountability, Higher Education & Electronic Portfolios

Hugh Crumley, Ginny Buckner, Anne Beatty, Duke University, USA

The past decade has seen increasing accountability standards in K-12 education, with growing pressure to demonstrate student learning through high stakes standardized testing; results in terms of real learning outcomes, though, have been unsatisfactory. Despite this, there is an agenda to advance similar evaluation in higher education. In addition to documenting faculty practices and other aspects of institutional performance, electronic portfolios in higher education have the potential to provide evidence of (and facilitate) real student learning outcomes. This paper presents descriptions of electronic portfolio practices in two programs at Duke University, highlighting benefits that address issues in accountability in higher education.

Digital repository, e-learning library and technology-supported learning

László Czeglédi, Eszterházy Károly College, Institute of Media Informatics, Hungary

While digitalisation and the establishment of digital libraries have been in the centre of professional research for years, recently more emphasis has been placed on the structure and elaboration of digital libraries and on the analysis of the respective services. This trend is best illustrated by the increasing professional interest paid to the question of library portals based upon a well-structured digital repository holding appropriate quality content and providing an optimal background for the support of e-learning learner management systems. The efficiency of instruction undertaken within a virtual context is dependent upon the adequate and personalized services provided via the respective appropriate interfaces.

A community of practice to promote informal KM learning in a university setting.

Kimiz Dalkir, Michael Shulha, McGill University, Canada

An online community of practice (CoP) for graduate knowledge management (KM) students was designed, implemented and assessed An innovative coding framework was used to analyze the discussion forum content of KM CoP forums in order to evaluate how successful the KM CoP was in meeting its objectives, A number of critical themes were also identified with respect to what did not work as well as anticipated during the course of using the KM CoP to complement lecture-based classes. These are presented as a set of best practices that address CoP roles, membership and participation levels, community activities and technology issues.

Maximizing Internet Learning for Students with Reading Challenges

Peggy Dalton, Freedom Scientific, USA

This presentation will provide a road map for using the Internet as a tool to support struggling students, including those with diagnosed learning disabilities.Using the WYNN software from Freedom Scientific, we will explore tools to support information gathering and strategies for reading, comprehending, and learning web-based information. Presenter will conduct a search, locate information on a specific topic, read the information using WYNN's bi-modal reading tools, except relevant text, and use a variety of study tools to learn the information.

A Model for Online Student Community Building at the Program Level

Anthony R. Davidson, Kristen Sosulski, New York University, USA

This paper describes the use of various technologies and student engagement strategies to encourage, support and sustain communities within the online teaching and learning spaces. Examples of activities that fostered the development learning communities within the Management and Systems distance education program at NYU's School of Continuing & Professional Studies will be illustrated along with the pedagogy used to foster these initiatives.

"Put the Milk in the Back": The Design of Persistent Social Spaces in Virtual Worlds

Lisa Dawley, Boise State University, USA

In this session, the author explores the question, "How do we design persistent social learning spaces in virtual world environments?" The author draws upon her experiences building EDTECH Island, a virtual world environment in Second Life, and designing and teaching a graduate course on the island. The concept of using nodes and pathways to encourage physical and social interaction with the environment will be discussed. Tracking data is shared to understand the development of the island as a resource for graduate students and other virtual educators. An iterative design model is proposed for considering further development of social persistence in virtual world environments.

Significant Learning Evaluation: a case study

Nelkis de la Orden, Cientistas Associados, Brazil; Paulo José de Freitas Filho, Universidade Federal de Santa Catarina, Brazil

This research proposes a method of qualitative investigation for the evaluation of the knowledge construction process in scenarios of collaborative writing. Two scenarios were analyzed and compared: traditional collaborative writing and computer supported collaborative writing (Equitext collaborative text editor). We used two premises as our starting point. The first one was the assumption that computer supported collaborative systems and, particularly, collaborative text editors, should contribute to favor critical thinking, and consequently, deep learning. The second was that collaborative text editors should offer better conditions for the process of collaborative construction of a text, if compared to the traditional writing process. We demonstrated which results could be obtained in collaborative learning environments in terms of development of critical thinking, particularly in collaborative writing scenarios.

What Competencies Does the Successful Online Learner Need?

Ileana De la Teja, TeleUniversite Quebec, Canada

It is often assumed that online learning is different from classroom learning and that the successful online learner must possess specific skills and characteristics. The usual question is, are online learner competencies different from those of the face-to-face learner? This paper contends that learners in any setting require certain competencies, and the strategy of the event, not whether it is online or face-to-face requires specific competencies. We analyzed the hints and tips higher education organizations offer to their target audience to find characteristics and skills of the online learner. Given that most online learning now imitates classroom instruction, the new competencies required specifically for online learning, if any, have not yet emerged. We suggest that the use of technology, the degree of collaboration, and the extent to which students or the instructor manage the use of time are far more important determinants of the competencies required.

How to Blend C-Learning and E-Learning into Individual Learning Paths for Adult Learners

Hilde De Rijbel, Sophie Van der Avort, Koen DePryck, CVO Antwerpen-Zuid, Belgium

This session presents and illustrates some of the conditions required to compose a balanced blend of contact and distance learning, based on our experience in adult education. In order to create a stimulating learning experience, it is imperative to avoid the pitfall of focusing on theoretical content delivery during face to face sessions and offering exercises through the electronic learning environment. We demonstrate how developing and implementing powerful interactive learning objects became a pedagogical challenge by creating individual learning paths.

How technology serves non-traditional students in one teacher education program in southern Arizona

Denise De Vito, University of Arizona South, USA

The University of Arizona South (UAS) is branch campus of the University of Arizona that provides liberal arts and professional instruction to citizens throughout southern Arizona. This article describes how technology is used by the UAS teacher education program to provide services to non-traditional students. Discussion focuses on the programmatic benefits, population demographics, and technological tools as part of an overall effort to service a growing area in the state.

Collaborative Learning with Tools for Web-Based User-Generated Content

Carol DeArment, University of Pittsburgh, USA

Newer Internet technologies such as wikis, blogs, and podcasts allow learners to "publish" their work in various stages to get feedback from select audiences or the public at large. Many educators are exploring ways that these tools can engage learners with content while fostering interaction and collaborative learning. New applications of these technologies for learning will continue to grow as a knowledge base of their potentials is developed. At the same time, instructors must formulate guidelines for ways to effectively implement these collaborative technologies.

From Instructional Design to Best Practices: Approaches to Corporate e-Training of Technicians

Marc Debiase, West Virginia University, USA

Development of digital multimedia technologies is the primary foundations of viable e-learning. Content, technologies and services have emerged as the three main components of the e-learning industry (Nagy 05). Formulating best practices for designing e-learning instruction targeting extremely hazardous and/or delicate service technologies revolutionize modern instructional design. As mishandling can cause either serious injury or death to individuals and/or damage to equipment. This best practices session discusses a successful corporate technical e-training program based on strategic instructional design and multimedia content. Learners respond to the course with appropriate learning outcomes, attaining proper attitudes before attempting procedural exercises. While much data driven research continues to explore developing e-learning techniques, this highly adaptable approach to instructional design underscores a successful methodology.

Interactive Podcasting: Building Student Capability for Reasoning

Gregory DeBourgh, University of San Francisco, USA

Abstract: This paper describes a university's experience using interactive unfolding clinical case studies in science curricula to facilitate students' acquisition of advanced skills in reasoning, problem solving, and reflective learning. The instructional

design employs multimedia case "evidence" (images, graphics, video, audio prompts) to engage learners in actively constructing an understanding of content and process knowledge. Podcasting software is used to enable convenient access to audio and video files that enhance the reality and variability of case studies that are "solved" by collaborative student study groups. The instructional strategy fosters communities of learners, embeds opportunities for feedback and self-assessment during learning, and prompts learners to interact with complex, dynamic variables to develop skills in reasoning. Operational aspects of initiating and refining use of podcasting to support interactive unfolding clinical case studies are described.

Unfolding Clinical Cases As Interactive Podcasts: Modeling Advanced Reasoning and Heuristics

Gregory DeBourgh, University of San Francisco, USA

Abstract: This paper describes a university's experience using interactive unfolding clinical case studies in science curricula to facilitate students' acquisition of advanced skills in reasoning, problem solving, and reflective learning. The instructional design employs multimedia case "evidence" (images, graphics, video, audio prompts) to engage learners in actively constructing an understanding of both content and heuristic process knowledge. Podcasting software is used to enable access to audio and video files that enhance the reality and variability of case studies that are "solved" by collaborative student study groups. The instructional strategy fosters communities of learners, embeds opportunities for feedback and self-assessment during learning, and prompts learners to interact with complex, dynamic variables to develop skills in reasoning. Operational aspects of initiating and refining use of podcasting to support interactive unfolding clinical case studies are described.

The Design and Performance of Intermediate Constraint Questions for an On-Line, Introductory Course in Natural Science

Raymond DeFrain, Ralph Locklin, Jacqueline Sturgeon, Paul Howell, The Pennsylvania State University, USA

The authors have developed and evaluated an on-line, open-book quiz database for an introductory course in the natural sciences. The quiz database has proved to be remarkably robust, and its integrity has not been compromised after four years of use; average quiz scores have not shown any systematic change with time. However, both as a response to critics who complain of excessive use of multiple choice questions and in an attempt to increase the effectiveness of the course in promoting scientific literacy, we have explored the use of questions that require students to make not one response on test questions, but several responses to tightly related or complex questions. We present information about these "intermediate constraint" questions, and show how these question types add to the evaluation of student progress. We also show that these question types effectively discriminate between students that prepare well and those that do not.

Dancing to the tune of in-house Web applications development in higher institutions: the case of a South African University

Johnson Dehinbo, Tshwane University of Technology, South Africa

This study is aimed at eliminating the phobia attached to the use Web-based platforms for the development of web-based applications that can enhance learning and assessment. The study is motivated by the dwindling enrolment and the low pass rate for Web applications development specialization, and low in-house developed Web applications at a South African University. We first investigate the level of adoption and use of Web applications in the institution. Then, a simple Web application for the online access, completion and submission of assignments and tests was developed using PHP. This aims to highlight the educational, developmental and economical effects of multimedia, Web development platforms and telecommunications. The developed system was demonstrated to the students at the beginning of a semester to serve as an interactive model towards development of more functional applications by students at the end of the semester, and to stimulate institutional adoption and use of Web applications.

Gameproject: A Multimedia Presentation Of A Joint Project For A Degree In Education

Esther Del Moral, Lourdes Villalustre, University of Oviedo, Spain

A training activity based on webquest philosophy has been designed for the virtual course "Education in a rural environment"(Rur@Inet) for the degree in Education at the University of Oviedo, Spain. It has been endowed with an added motivating factor in that it is presented in the form of a multimedia story of the kind characteristic of videogames, thus forming what we have called Gameproject.

A Virtual Environment for a Plan of Equality Gender in a Municipality: A Collaborative Work through the Let Me Learn® System.

Annachiara Del Prete, Rovira and Virgily University, Italy; Laura Villamizar, Rovira and Virgily University. Spain/ University of Pamplona., Colombia; Mercè Gisbert, Angel Pío González Soto, Rovira and Virgily University, Spain

This paper explains the process of design, implementation and evaluation of a virtual environment made with the aim of the creation of a Plan of Equality Gender for one Municipality with 130.000 inhabitants in Spain. This research is carried on the bases of an agreement between the City Council of the Municipality and the local University. The researchers, authors of this communication, are PhD students on Educational Technology and are the people who give scientific and academic support to the city council in gender and Let Me Learn® issues. We focus in explaining how we build the work methodology for the staff in charge of the plan under the guide of Let Me Learn® system. We found in our study positive outcomes about the use of the virtual environment as communication, formation and collaborative tool between the different areas involved. Another interesting conclusion from our study is the high level of satisfaction of our users knowing their specific learning profiles which contributed to an excellent team work.

Gender Perspective in Teaching and Learning Processes using a Webquest: The case of an Education Faculty.

Annachiara Del Prete, Rovira and Virgili University, Italy; Laura Villamizar, Rovira and Virgily University. Spain/University of Pamplona, Colombia; Mercè Gisbert, Angel Pío González Soto, Rovira and Virgily University, Spain

The authors of this paper, due to their research profile in gender issues and their work in a Faculty of Education of a public Spanish university, presented in 2006, a proposal to introduce the gender perspective in the formation process of the students and teachers in their Faculty. The proposal was presented to a Spanish institute in charge of the promotion of equality gender in the region. They accepted it and now it is a project divided in three stages. An importan part of the project is the creation of a pilot group of faculty teachers with expertise in gender perspective. In this stage of the project, it is consider the use of a WebQuest as a didactical strategy, in which our pilot group of teachers generates by itself the knowledge on gender issues.

An Exploratory Study of Blue-Collars Experience of Learning to Use Internet and Mouse

Dilara Demirbulak, Ali Riza Askun, Cankaya University, Turkey; Cengiz Savas Askun, Middle East Technical University, Turkey

The participants of this exploratory case-study are the blue-collars at higher education. The reason for focusing on them is two-facet. The first one is for professional development of these personnel for improvement of use of human resources. Secondly, to enable them to improve their interaction with their children. Finally, to collect data to evaluate the teaching performance of the instructors based on the assumption that instructors should identify the needs of diverse populations at an educational setting rather than instructing a class. Based on the data gathered so far it can be said that one of the main challenges is the use of PCs for some adult learners.

Student teachers` attitudes towards animations at an higher education setting

Dilara Demirbulak, Cankaya university, Turkey

At the beginning of the semester student teachers were asked to get nto groups and choose one language teaching method and present it using the 3P model (presentation, practise, product)during methodology course where this explatory study was carried. This practise was a result of negotiations with the student teachers whose mpetus for learning was high. The student teachers personalized their micro-teaching by designing various educational techologies and techniques where animations took the lead. This study aims at investigating users` attitude towards animations in general, animations used in the teaching/learning process. The data collection period will be completed as of this week. However, it can be said that the results of the study can be used to eploit the use animations in higher education.

Learning and Interactive Modules: An Experimental Study

Marie-Anne Demuynck, Mark Hamner, David Marshall, Texas Woman's University, USA

This paper describes the results of an empirical study on the effectiveness of interactive web-based learning modules for use with lower level computer science and elementary statistics courses. The project was designed to measure if interactive web-based modules are effective as a learning tool, and if so, can we measure how effective they are. One of the statistical modules was selected as the test module. Analysis of covariance (ANCOVA) was used to analyze the results of the four groups: Non-Treatment, Lecture Only, Module/Lecture, and Module Only. Results show that participant's scores in both the Module/Lecture and the Module Only groups significantly outperformed the No Treatment and Lecture Only groups. These results indicate that the selected module was highly effective, either alone or in combination with traditional lecture-based content delivery. This may substantiate the educational philosophy which supports using both traditional pedagogic methods and technology-based components in tandem to enrich learning.

MyLexic : An Assistive Multimedia Courseware for Teaching and Reinforcing Basic Reading Skills among Dyslexics

Anusuriya Devaraju, Zeratul Izzah Mohd Yusoh, Mohd Hafiz Zakaria, Umawathy Techanamurthy, University Technical Malaysia Melaka, Malaysia

One of the most promising areas of education is the development of computer-based teaching materials, especially interactive multimedia programs. Interactive multimedia allows independent and interactive learning, and yet presents the learning information to the learners in newly engaging and meaningful ways. This paper delivers the theoretical concepts and design of a multimedia courseware called 'MyLexic'. 'MyLexic' is the first learning tool to nurture interest on Malay language basic reading among preschool dyslexic children in Malaysia. The theoretical framework proposed in the study is based on research in dyslexia theory with Dual Coding Theory and Scaffolding instructional technique. Demonstration of the courseware prototype is also presented. The courseware is hoped to contribute a significant idea to the development of technology in Malay language education for dyslexics in Malaysia.

ASSESSMENTS in TECHNOLGY ASSISTED LEARNING

Patrick Devine, Strayer University, USA

ABSTRACT The Constructivist's view of education transforms the role of instructor from an instructor-centric knowledge provider to one where an instructor performs a mentor role responsible to guide individuals through the education experience. Continual technology advancements and improvements have transformed how students obtain information. This transformation has introduced Technology Assisted and Distance Learning as a viable solution for meaningful learning. This paper will explore how to retain personal assessment interaction and analysis while leveraging the different capabilities of distance learning. We will identify how instructors can assess what a student learns while resisting the role of "sole information provider." Although it is proper and appropriate to leverage technology assisted assessments, they will not replace the teacher's obligation to assess individual student progress on a personal level. We will conclude that Technology Assisted Learning must be developed and supported with proper rubrics and properly resourced to be effective.

Educational Approximation for Content Creation on a Multiplatform ebusiness Application

Julia Diaz, Mónica Garcia, Marco Ramos-Otero, Instituto de Ingenieria del Conocimiento-UAM, Spain

The intent of this document is to present the method followed in the elaboration of the final product called Unidades Mínimas de Conocimiento (UMC) [Minimal Units of Knowledge]. The object of the UMC is the development of small eLearning units. The requirement of these units, from the computer software base, is to be transferable to a non commercial ebusiness platform and to any commercial eLearning platforms which allow content under the SCORM reference model. Another requirement that we have kept in mind for this method is the need to massive produce without the implications of the human factor in the software developing face. That is why we have developed a series of templates using the XML Standard, and the object of this document is the distribution of these. Through these templates and with very little knowledge of programming, the experts in Methodological formation may create teaching contents with minimal effort.

Learning Objects in Open Source environments

Francisco Javier Díaz, Alejandra Schiavoni, LINTI - UNLP, Argentina

In the recent years, e-learning has become most important due to the extended use of ITs. This has given place to several standards that allow the development of high-quality educational content. The SCORM content creation process requires a series of stages for the identification of learning objects and the incorporation of metadata and communication functions with LMS. Through this communication, it is possible to track the learner's progress during the course. However, incorporating this communication is not a simple task, since to do so, it is necessary to know the standard implementation in detail. This article proposes an Open Source tool, with the goal of making easier the incorporation of functions implementing communication between learning objects and LMS. The tool extends the functionality of an HTML editor, so that the author of a web page has the possibility of adding communication-oriented predefined components at the stage of creation.

Re-Engineering of Assessment Practices (REAP) in Language teaching

Michele Dickson, University of Strathclyde, UK

Abstract: as part of a major Scottish project on re-engineering of technology-based assessment practices linking three Higher Education institutions, a new assessment system has been implemented in the first year French Language course at the University of Strathclyde, Glasgow, UK. The use of new teaching and assessment approaches has had to be balanced with the constraints of largely traditional pre-existing institutional structures. This presentation will cover the drivers behind the changes, the issues specific to the nature of language acquisition, the architecture of the new system and an evaluation of the changes in terms of costs, student satisfaction and an improvement in student results. It will show how assessment changes are indissociable from an in-depth re-think of the whole teaching process.

Transformative Distance Learning: Using Critical Discourse Analysis to Understand Perspective Change in Adult Asynchronous Learners

Michael Dieter, University of Illinois at Chicago, USA

Abstract: Transformative learning (TL), a form of adult constructivist learning, offers a way to understand and explain changes in adult learners beyond the acquisition of explicit learning content. This involves the study of changes in their worldviews or meaning perspectives promoted by critical self-reflection and interactive discourse. Given its tremendous growth, it is important to better understand how adult learners are benefiting from participation in online learning, including asynchronous distance learning (ASL). Understanding how ASL is able to provide an educational environment that is conducive to TL could contribute to a deeper understanding of adult learning and its assessment. By systematically examining empirical evidence from the text archives of online class discussions in accordance with a critical discourse analysis (CDA) framework, it is possible that alternative, dialogical understandings of high level adult learning will emerge.

A Better Way to Manage Your Content

Naza Djafarova, The G. Raymond Chang School of Continuing Education, Canada

The significant growth in both volume and quality of online courses offered by The G. Raymond Chang School of Continuing Education at Ryerson University could only have been achieved by implementing a standalone CMS. In this presentation, The Chang School will showcase their implementation of a CMS for distributed development, delivery, and management of learning materials. This CMS enforces standards which are necessary to achieve accessibility, interoperability, flexibility, reusability, and affordability, while at the same time putting "ownership" of content into the hands of subject matter experts. We will discuss how we have used our CMS to establish best practices in course management; effectively develop and maintain standards in pedagogy and instructional design; improve the efficiency of our course development and delivery process (workflow); support the professional development of our subject matter experts; and support the collaboration of courses development with other universities

Hybrid Instruction 101: It's in the Design

Antonia D'Onofrio, Kathleen Bowes, Widener University, USA

Abstract. The development of hybrid/blended courses has become a growing trend in higher education. Since hybrid instruction combines face-to-face instruction with elements of online learning, the crafting of a meaningful course design can be daunting. Instructional strategies that blend face-to-face instruction, online projects, and activities that use asynchronous and synchronous instruction are the cornerstones of this design. Instructors need to incorporate technology elements, such as, message boards, email, and chats, in such a way that instruction does not simply mirror traditional instruction but exploits interactive aspects of pedagogy. This paper explores a number of design alternatives that address the problem of matching instructional design to instructional purposes.

A review of research studies exploring computer use in early childhood settings

Judy Donovan, Indiana University Northwest, USA

Research studies published in the last five years (2001-2006) are examined in the area of computer use in early childhood settings. Results of the literature review reveal few research studies in this area, however, in the studies examined, computers are found to increase achievement in areas of social skills, academics, problem solving and more, though there is a strong need for more research, especially focusing on new technologies and software.

High Quality Internet Resources for Early Childhood Teachers

Judy Donovan, Indiana University Northwest, USA; Delia Pass, Cedar Grove Elementary, USA

This session will demonstrate high quality, free Internet resources for early childhood teachers. (Many of the sites can also be used by K-2 teachers). The presentation will highlight the wide variety of websites available for early childhood students to utilize in such areas as math, early literacy (especially talking books), social studies, science, games, interactive activities, and much more. Annotated, detailed handouts will be available in print and electronic form. Attendees will also view great websites for teacher created materials. Attendees will depart with a greater appreciation for the variety and quality of free materials available to early childhood teachers, and a comprehensive listing of websites to access in their classrooms. Attendees will be able to immediately apply what they have learned, and to utilize the vast resources available to early childhood educators and students.

Analysis of Blackboard and Open Source Course Management Systems in Online Instruction

Anthony Dralle, East Carolina University, USA

The paper discusses the background and development of a study in which students and the instructor analyze three different Course Management systems commonly used in online instruction: Blackboard, Moodle, and Sakai. Each class used one of the three online Course Management systems, and students in each class completed surveys before, during, and after the class concerning the role of the Course Management system in facilitating participation, communication, and critical thinking in the course. The instructor/researcher collected and analyzed survey data, instructor-made field notes, and student discussion responses to generate assertions concerning the effective use of each of the Course Management systems.

A Dialogue on E-Learning and Diversity: the Learning Management System vs the Personal Learning Environment

Jon Dron, University of Brighton, UK; Madhumita Bhattacharya, Massey University, New Zealand

This paper is presented as a dialogue between proponents of the traditional learning management system and personal learning environments. The dialogue form is used to highlight the fact that the struggle between top-down, traditional, institutional processes of education and the bottom-up, learner-led, chaotic world of the twenty-first century learner is a wicked problem that is not easily resolved. The conclusions are necessarily ambiguous, but it is proposed that a model of learning that gives learners the ability to decide what level of control is appropriate for them is ideal.

Collectives, Networks and Groups in Social Software for E-Learning

Jon Dron, University of Brighton, UK; Terry Anderson, Athabasca University, Canada

: A number of writers have identified (and argued about) the importance of either the group or the network as a significant player when social software is used for e-learning. This paper examines the two competing perspectives of network and group and identifies that there are, in fact, three distinct dynamics of the 'Many' in social software, which are characterised here as the group, the network and the collective. The paper explores the consequences of this perspective, observing that each has both strengths and weaknesses in different contexts and when used for different applications. A model for the development of e-learning tools and processes is proposed that makes best use of each mode of interaction.

Online Collaborative Discussion: Myth or Valuable Learning Tool

Jianxia Du, Vance Durrington, Jerry Mathews, Mississippi State University, USA

This study was designed to examine online group discussions from a student's perspective to determine what characteristics students identify as meaningful to their learning. Quantitative data were collected, analyzed, summarized in six tables. The overall results indicated that students preferred to have time to reflect on their discussions before having to give their answer. They also indicated that critical thinking skills and goals for course achievement were enhanced in online collaborative discussions. Students did not have a clear preference for group size whether for small groups or the entire class. Technical discussion projects were a preferred component of group discussions. Students were divided on their preferences for group work but overall preferred to work alone on online projects. Taking students' perceptions into consideration, this study provides valuable implications for instructors to help students effectively self-regulate their online discussions, and positively enhance their online collaborative learning experience.

Racial and Cultural Awareness Affecting African American Female Students' Experiences in E-Collaboration

Jianxia Du, James Adams, Mississippi State University, USA

Research suggests that African American female students might participate in online collaborative activities for cultural reasons. This study described African American female students' participation in online discussions and the dynamic ethnic factors that impact the confidence of African American female students in online collaborative learning. Three major phenomena described African American female Students' e-learning collaborative experiences: a preference to be the leader in the group to decrease their level of inferiority, a willingness to work in a mixed group to combine knowledge from others that will enhance their overall presentation, and a timid attitude towards participating in discussions due to intangible racial identity.

Vemics Live Communication Projects: Live Access to teach Global Business English to Russians employed by International companies in Russia

Blair DuGray, Glenn Kessler, Vemics, Canada; Doug Player, Player-Works Inc., Canada

Live e-learning systems provide an exceptional way for outstanding educators to teach group of learners, regardless of location. In addition, live e-learning systems enable real-time collaboration between students, often allowing them to break out into smaller “rooms” to discuss and share ideas.The University of Miami, a premier research institution in the United States of America, now offers a Global English Program (GBE) online. It will help you learn how to express yourself effectively in English about topics relevant to your work surroundings and life.The virtual program helps businesses and individuals develop conversational proficiency and self-confidence in speaking English.

Vemics Live Communication Projects: School Age children use Live Access to Learn English

Blair DuGray, Glenn Keslser, Vemics, Canada; Doug Player, Player-Works Inc., Canada

Live e-learning systems provide an exceptional way for outstanding educators to teach group of learners, regardless of location. In addition, live e-learning systems enable real-time collaboration between students, often allowing them to break out into smaller “rooms” to discuss and share ideas.Vemics has brought together a selection of high-achieving North American educational institutions and established a strong partner network throughout Russia to offer students, grades 4-8, the ability to obtain a western education online while also completing their local schooling in their home country.Vemics is a leading provider of hosted, real-time conferencing and collaboration applications. Vemics LiveAccess™ solutions combine multipoint video / voice and data technologies with industry specific content backed by consulting expertise and deep customer support. Vemics enables organizations large and small to collaborate and learn face-to-face, online from almost anywhere with little or no capital investment.

Blogging in Higher Education

Martin Ebner, Graz University of Technology, Work Group Social Learning, Austria; Hermann Maurer, Graz University of Technology, Institute for Information Systems and Computer Media, Austria

This paper describes a Web2.0 approach to distant teaching a master course for students of informatics on Graz University of Technology. The course has been implemented by using a blogosphere for writing and collaborating. Students were able to choose whether they contribute to a new didactical concept on voluntary basis instead of writing the essays in a traditional way. The aim is to show that a good didactical concept combined with technological implementations can enhance the purposes of learning and teaching at educational institutions. The complete concept as well as all implementations are described and discussed. The publication points out that the use of the blogosphere named TU Graz LearnLand helped to turn the content of the lecture to a more student-centered one. In the end it must be taken into account, that this considerable effort requires a change of the role of the lecturers.

Designing an E-Learning Platform for Reading Comprehension

Jan Ehrlich, Sven Radde, University of Passau, Institute for Information Systems and Software Technology, Germany; Axel Polleti, University of Passau, Language Centre, Germany; Burkhard Freitag, University of Passau, Chair of Information Management, Germany

In this paper we present an innovative e-learning platform that was specifically designed to support the teaching of reading comprehension skills. First, we describe the principal difficulties of reading in a foreign language and then detail how the multitude of exercise types the presented system has at its disposal, gives support in acquiring reading comprehension skills. We show a few more supportive features of our platform and furthermore present the intuitive WYSIWYG style authoring tool which constitutes a major benefit for language tutors in creating and modifying the contents of the platform. Finally, some technical details are sketched and future developments of the platform are discussed that may also be of particular interest for the maintainers of other, similar e-learning systems.

Video Documentaries: An Alternative to the Term Paper

Brian Elsesser, Harris-Stowe State University, USA

Can a documentary video project replace the traditional term paper in upper level history courses? This presentation will discuss how programs like iMovie and Windows MovieMaker allow students to creatively delve into American history.

A comparison study on the performance of students in a online group versus a traditional group in a relatively small university

Monique Emelina-Pieter, University of the Netherlands Antilles, Netherlands Antille

The purpose of this experimental design with pre-test and post-test, was to compare the performance or learning outcome of online and traditional educational forms. This experiment (2007) was conducted over a 14 week semester with fifty-nine 3rd year graduate students, which were randomly assigned to either a traditional or online group. Control measurements were in place such as the online groups and two traditional groups being taught by the same professor. Descriptive statistics, Chi-Square test and an independent t-test were used for data analysis. Results indicate that on average around thirty percent of the students are dropouts. Tests indicate there is no statistical difference between dropouts in the traditional and online group. Findings revealed that the report grade and final grade for traditional group were significant higher than for the online group. Further research is needed to look into the influence of student characteristic on the performance of students.

Using an On-line Supported Text Homework System in Undergraduate Precalculus Classes: A Pilot Study

Brian Emond, University of Massachusetts at Amherst, USA

Approx. 2300 students take Precalculus each year, many identified with learning disabilities. Class sizes range from “small” classes of 80-100 students, to large lectures of 250-300. In Fall’04, 40% of Freshman Precalculus students received a grade = C-. The Precalculus curriculum had been using the same text and “chalk & talk” methodology for over twenty-five years. Research shows students experience higher levels of enjoyment and success in learning mathematics when using computers combined with constructivist teaching methods. Previous research, which found no measurable improvement in student success when using such a system, did not require the use of the software as in this study. I investigated five online-

supported text systems and four mathematics learning software packages. I chose one system to do a pilot study in Spring'07 in two classes of 279 and 77 students. Preliminary results show an average increase of one full grade. All classes will use the system this Fall.

Learning Environments and Students Preferences

Sylvia Encheva, Stord/Haugesund University College, Norway

The goal of this paper is to present a framework that assists a lecturer in building courses by reusing learning objects developed at other educational institutions. It is a client focused social and participatory service delivery model which emphasizes the active participation of the student in the selection of appropriate learning objects.

Teaching A Contact Profession Online: Development Of Training Modules For Serving Students With Deaf-Blindness

Melissa Engleman, Alana Zambone, East Carolina University, USA

The presenters were commissioned to develop online training for teacher assistants (paraprofessionals) across North Carolina who serve students with deaf-blindness. A universal design for learning approach was applied, and multi-sensory technology solutions were explored. The unique challenges of the trainee population characteristics, the physically interactive and individualized nature of the content and the available training technologies guided the design of the study. The training module development and delivery and the ongoing results of the study were discussed. Continuing questions resulting from this study were posed.

Peer cultures in Internet communities: An analysis of tweens' presentation pages

AnnBritt Enochsson, Interactive Institute, Sweden

This paper is part of a larger project where the overall aim is to understand the importance of communication in the Internet community LunarStorm on the social life of Swedish tweens. The aim of this specific paper is to describe the design of the presentation pages and to discuss what this means in this context. The presentation pages were analyzed out from the appearance regarding choice of colors, length, use of symbols and photos, but also from different types of written messages. Initially the role of the presentation page in this group seemed to be a way to present oneself, but has changed towards a more anonymous first page. There may be several reasons for this, for example being cautious about exposing oneself to unknown people, but also that places like LunarStorm for this age group increasingly has become a place where you meet the friends you already know from school.

An experience in distance learning for university and secondary school

Francesco Epifania, Università degli Studi di Milano, Italy

Abstract: The University of Milan launched an on-line didactic project to support students with integrated materials with the intent to help particularly those ones in difficult because non attending some course or disease affected. These first aims made possible to create WebCen. The project involved also in the creation of simple instruments for the publication of shared materials not only by teacher's expert in Information Technologies.The success of the initiative induced the search of other advanced instruments to make possible to share more kind of information that are not only textual ones, but also video and audio lessons. The improvement of the platform make today possible to share also experiences among students and a better dialog between students and teachers.The adoption of the SCORM standard let possible the cooperation between University and Secondary level schools, to share information and to better prepare students of last years of Secondary schools to the access to University, on the basis of a preparation with a common language finalized to University studies.

Best Practices for Formative Assessment: Empirical and Anecdotal Evidence from a College Classroom

David Eplion, Thomas Keefe, Indiana University Southeast, USA

The investigators have been using formative assessment in the form of on-line pre-tests in their college classrooms since 1999. They have learned from their own personal experiences that administering formative tests on-line has significant administrative advantage over paper and pencil in-class testing that can be time consuming and burdensome. In addition, the authors have recently completed a study over two years where they used on-line formative assessment as an integral part of their upper division undergraduate business classes. Their initial findings indicate that formative assessment is indeed beneficial for student learning. Further analysis provides support for the "motivating" benefit of formative testing as opposed to feedback effects.

Enabling new Learning Scenarios in the Age of the Web 2.0 via Semantic Positioning

Patrick Erren, Reinhard Keil, University of Paderborn, Germany

Learning processes can be characterized as knowledge work on the level of dealing with digital objects. Thus traditional media arrangements employed in knowledge work like the desk or study need to be considered in respect to a virtual setting. This paper details how similar structures within virtual spaces enhanced with Web 2.0 features can enable a multitude of new learning scenarios. This will open up new learning arrangement perspectives, which cannot be implemented in traditional media. In addition to the editing of learning objects, we also want to introduce new arrangement functions based on semantic positioning.

X-TEC Model and QEF Model: A Case Study

Paula Escudeiro, ISEP - Instituto Superior de Engenharia do Porto, Portugal

In this paper we present a case study with Techno-Didactical Extension for Instruction/Learning Based on Computer model and an evaluation framework to overall the assessment of the Quantitative Evaluation Framework (QEF) approach which has been applied in an operational teaching environment for the last six years During this period we have evaluated the Difference between educational software systems that were developed using the Techno-Didactical Extension for Instruction/Learning Based on Computer (X-TEC) model and educational software systems using other models such as

object oriented analysis and design or even structured analysis and design methods,In this research project we conduct experiments with groups of students and teachers in Multimedia Information Systems classes of Oporto Polytechnic, to examine the influence of training in an instructional system design approach on their attitude to re-use this approach and on their performances in design, using this approach

"I need a green axe": Video Games and Your Social Studies Classroom

Mark Evans, University of Georgia, USA; Michael Barbour, Wayne State University, USA

Today's students are natives of technology more than ever before. Along with being natives of the digital world, students are also avid video game players in a way that the previous generation was avid television viewers. There is a movement in some circles within the academy to explore how video games of how video games can be integrated into the schooling experience. This session explores this innovative, and controversial, teaching technique and strategy. By using the online video game Guild Wars® as an example, new pedagogies for reaching these students (and a myriad of social studies principles) will be explored.

Making Sense of Video Games: Pre-Service Teachers Struggle with This New Medium

Mark Evans, University of Georgia, USA; Michael Barbour, Wayne State University, USA

This next generation of students have had exposure to digital media far more than any previous generation, particularly video games. Almost daily, news outlets report the latest news on the evils of video games, how much children are playing video games, the potential of video games, and the list just goes on. In this presentation, the researchers explore how pre-service teachers make sense of a commercially purchased video games and its role in classroom teaching.

A Peer-to-Peer Collaborative Framework Based on Perceptive Reasoning

Oivier Eymard, Eric Sanchis, Jean-Louis Selves, LGC, France

Collaborative Learning Systems are often developed to enhance the communication between the actors. These systems suggest a lot of interactivity to collaborate and a great efficiency to look for and to find solutions to a great number of problems. But in certain educational contexts, numerous communication tools distract the users from their main collaboration activity. RetroMob is a peer-to-peer (P2P) lightweight framework which focuses on the collaborative activity dedicated to the emergence of individual solutions built from the parallel perception of solutions suggested by the other members of the group. For that, the mechanisms of interaction between the users are restricted to the discovering and to the transparent and anonymous transfer of the solutions suggested by the peers.

Nested Communities for Professional Development

Joni Falk, Brian Drayton, TERC, USA

This paper shares the experience, reflections and lessons learned by the designers and facilitators of a large online learning community, funded by the National Science Foundation to serve as an electronic infrastructure for NSF's Math Science Partnership Program. This learning community, MSPnet (http://mspnet.org) was created to serve multiple, nested communities composed of university faculty, K-12 educators, administrators, and professional developers who were engaged in efforts to improve math and science education. The paper will focus on how one designs online communities that facilitate effective professional development. It will focus on three factors that strongly affect the user experience -- the structure of the online community, the nature of the professional development, and the facilitation and administration that takes place behind the scenes.

An investigation of the operational change involved in implementing Information Technology at a high school in Macao

Chun Wai Fan, University of Macau, China

Changes in schools are often triggered by practical need. However, even if the need is correctly understood?, implementation of change frequently ends in failure. Failure is very often the result of ineffective management of the implementation process. In this paper, we examine a change associated with a process of ICT implementation at a high school in Macao. The change, in spite of its practical functions, is regarded as a failure by the teaching staff after two years of implementation. A modified framework of the key themes in the implementation is employed to speculate on the causes of this failure and suggestions for successful implementation of similar change are provided.

The quality evaluation of e-learning processes

Adriana Fantini, Marta Dans, Economics' School of Public National University of Patagonia Argentina, Argentina

This paper shows an experience made in the Economics Science Faculty of the Patagonia University of Argentina. To demonstrate how to apply triangulation in pursuit of making good use of the strong points of the qualitative and quantitative methodologies. The application experience of the proposed model to evaluate the quality of the interactions in the virtual space, was done in a course based on Moodle (Modular Object Oriented Distance Learning Environment), in which a debate space was incorporated, destined to follow instructions, contributed by the teacher-tutor. During the experience, triangulation of quantitative data with the qualitative analysis of the interaction reflected in the participation of students in such space was done, based on criteria previously accorded.

Job Characteristics and Computer Anxiety in the Academic Staff of Mashad Universities in Iran, 2006-2007

Elham Fariborzi, Islamic Azad University – Mashad Branch, Iran (Islamic Republic Of); Talat Khadivzadeh, School of Nursing and Midwifery, Mashad University of Medical Sciences, Mashad, Iran, Iran (Islamic Republic Of)

There are groups of academic staff that experience computer anxiety or negative affective attitudes to computers. In this study computer anxiety was measured by the Computer Anxiety Rating Scale – CARS and its relationship with job characteristics was investigated among the academic staff. The randomized sample included 150 academic staff of three Universities in Mashad-Iran in 2006-2007. Data analyses were performed by one-way analysis of variance, tukey and

multiple regression tests. The data analyses revealed that in addition to gender, age and educational level; the job characteristics of decision authority, the level of authority and training were the most important determinants of computer anxiety (p=.000). The level of interaction between instructor and learner was highly related to computer anxiety. New technology introductions should be accompanied by user involvement, appropriate level of training and active practical use. Special attention must be paid to academic staff has official post with high authority; in addition to female, lower educated and older academic staff.

Electronic Test Form with Elements of Game

Alexander Feinstein, Berkeley College, USA

Electronic test form is created based on Visual Basic application. Test randomly selects question from the chosen bank of problems. Each numerical value is randomly populated from the pre-defined interval. Student selects answer from 4 given choices. After each step image object on the screen (runner) is moving in a certain direction depending on right or wrong answer. The goal of the test is to get the runner to the final point with maximum collected points.

Techno+ Sped = A Winning Combination in Special Education

Pamela Felder, Alcorn State University, USA

One major concern for special educators has been how to meet specific learning needs of special education students. Through a collaborative effort, a partnership was formed with Alcorn State University and Franklin Middle School in Meadville, Mississippi to explore how technology can best be used to enhance basic mathematics and language arts concepts in special education classroom.

Designing an e-Learning Program and e-Learning Templates for Pratt& Whitney Canada

Jin Feng, Claude Martel, Concordia University, Canada

Abstract: This paper is about e-learning projects at Pratt & Whitney Canada (P&WC). One was to develop an up-to-date e-learning program on foreign object damage (FOD) prevention for the Engine Center at P&WC. A variety of instructional strategies were used in this e-learning program to improve the attitude learning involved and promote active online skills learning. The other project was to design reusable e-learning templates for the company. This project was the pilot project for the development of a rapid templating development tool which is helping to simplify standardize and optimize the company's online training initiatives. This paper describes in some detail the design and development of the e-learning program on FOD prevention.

Incorporating a Series of Multicultural Distance Classes into

Jinjin Feng, Shanghai Jiao Tong University, China

A series of multicultural distance empirical classes among Japan, Switzerland, Korea, Thailand and China was conducted to promote collaborative learning in second language acquisition community with a special emphasis on Chinese students' engagement in English learning. This study presents the latest (2007) and the first (2005) empirical classes of the series with a five-point Likert scale questionnaire and an informal interview to measure or understand students' attitudes toward the classes. Chinese students' engagement in English learning is improved by the effective use of live broadcast technology, downloadable class video, mobile phone short message service (SMS), a high-definition video-conferencing system, a text-based chat system, and a web-based voting system. The Chi-square analysis indicates no significant difference in students' evaluation of the two experimental classes. Students found the class enjoyable yet not as informative as expected. The study reveals that a more informative cross-cultural class with online voice message interaction is expected.

A Journey from WebCT to Angel

Wen-Li Feng, Ohio Dominican University, USA

This presentation will demonstrate how a small, liberal arts university with a limited staff has migrated from using WebCT to Angel Learning by executing a comprehensive plan to stage the migration process, with a focus on teaching and learning effectiveness and building a learning community among faculty members. The presentation will include results from the LMS migration plan and lessons learned.

Pedagogical Paradigm Shift: A shift from Traditional to E-learning Education

Chelsea Ferguson, Muskingum College, USA; Jared Keengwe, University of North Dakota, USA

E-learning provides more flexibility, greater convenience, and the ability for learners to work at their own pace. Even so, some questions persist as to whether e learning is an effective medium of learning. This paper explores evidence from recent studies to determine how e-learning compares with learning in a traditional classroom. Bias against online degrees withstanding, e-learning certainly is a wonderful option for many people who can not otherwise attend college for financial, geographic, or personal reasons. Therefore, there is need to train teachers who can support learners to be more self-disciplined as well as take more responsibility for their own learning in order to benefit from this learning medium.

E-Learning Literature Review to Investigate Reasons of E-Learning Failures to Meet the Expectancies

Bekim Fetaji, South East European University, Macedonia

The aim of the research study was to start from a secondary research and review the overall situation in the field of e-learning, review what are the trends, and state of the art in e-learning field. Literature review is provided on e-learning in general up to date. The objective was to find out the deficiencies in the current state of e-learning as well as conclude what is the source of the recent skepticism in regards to e-learning. Based on analysis of the actual trends in e-learning, solutions, advantages, disadvantages and experiences a number of serious problems have been identified. Further a methodology and recommendations are proposed to improve the situation.

Issues and Solutions in Distance Education

Bekim Fetaji, South East European University, Macedonia

This study is research into application and evaluation of distance education as answer to the skepticism that online distance learning is a valid and proven learning method. In order to asses and determine the general issues and barriers in online distance education this research has been undertaken and focuses in proposing solutions and recommendations. We discuss issues raised and recommended as well as solutions applied for a particular distance education environment and the findings were broadly generalized for all distance education environments. The data for this research was gathered from interviews with focus group and a web based survey of students, participants in online distance education courses. The main contribution of this study is the proposed DEVC methodology and recommendations in avoiding the assessed and evaluated barriers in distance education in regards with enhanced and life long learning.

Learning Management Systems Evaluation and Comparative Analyses

Bekim Fetaji, Majlinda Fetaji, South East European University, Macedonia

Universities and training institutions face a tough choice in selecting an LMS-Learning Management Systems were they must choose among a wide array of systems that will form their e-learning infrastructure. Qualitative research studies were concentrated in comparative analyses of e-learning technologies solutions. We have observed the statistical results, suitability and efficacy of the e-learning system as well as its level of usability. We have compared the effective system usage with prescribed scenario proposing 7 variables to be measured. The purpose of the research realized is in order: 1) determine the best choice for an e-learning management system and make recommendations, 2) compare two representatives of learning management systems and gather information on distance between learner activities and preconceived scenarios, interactions, intervention strategies and content.

Measuring E-learning Effectiveness Through Testing E-content and Attention Correlation

Bekim Fetaji, South East European University, Macedonia; Nada Pop-Jordanova, Tatiana Zorcec, Department of Pediatrics, Faculty of Medicine, University of Skopje, Macedonia; Silvana Markovska, Macedonian Academy of Sciences and Arts, Macedonia

This paper is a result of practical research activities focused on testing e-learning indicators: e-content and attention as well as their interrelated correlation. In order to investigate further on the possibilities of improving and increasing accessibility to e-content and attention, that from a previous study both were assessed as most influencing e-learning indicators, we have realized empirical research analyses focused in testing this indicators and their correlation. We have combined neuroscientific testing approach combined with psychometric testing and software engineering usability testing as new methodology for assessing e-learning effectiveness. Combination of all this methodologies in assessing and measuring attention based on e-content we named as PTPMELUAT methodology. Such examination is critical considering the promises, organization and management, heavy investments, expectations, and exponential growth associated with e-learning effectiveness.

Software Engineering Information Retrieval Courseware Based on E-learning Indicators

Bekim Fetaji, Majlinda Fetaji, Mirlinda Ebibi, South East European University, Macedonia

The main research was oriented towards creating a courseware system that will be based on assessed, measured and evaluated e-learning indicators and previous known concepts to users. The research is proposing a new way of tackling the process of creation of e-learning information retrieval courseware by integrating and undertaking the software engineering approach based on e-learning indicators and taking into consideration theories of learning pedagogical approach in its development. Also business objective expressed throw the cost effectiveness of the entire system was set as priority. Based on our research survey and user feedbacks it resulted in a courseware system that is cost effective and very usable. We recommend this courseware to departments were the staff computer literacy level is low and there are no financial means for a commercial learning management system.

Software Engineering Interactive Tool as Virtual Environment for Learning Web Design

Bekim Fetaji, Majlinda Fetaji, South East European University, Macedonia

The research is proposing a new way of tackling the process of creation of e-learning interactive environments by integrating and undertaking the software engineering approach based on e-learning indicators. The e-learning environment was envisioned for learning XHTML, XML and web design in general. This research makes two contributions: First it proposes the developed methodology called ELUAT (E-learning Usability Attributes Testing) and as measuring instrument the PET (predefined evaluation tasks) inspection technique and gives insights and evaluation of their usage. Secondly it investigates the tool-oriented learning approach and modeled to support project based learning. Its practical usage has shown that it has proven as valuable tool to reinforce learning web design concepts and represents a good introduction to computing and structural programming principles, as well as creates the habit of proper coding styles.

Integrating ICT into Higher Education: A Qualitative Investigation of Onsite vs Online Students' Perceptions

Gerard Fillion, University of Moncton, Canada; Moez Limayem, University of Lausanne, Switzerland; Therese Laferriere, Robert Mantha, Laval University, Canada

For the past two decades, information and communication technologies (ICT) have transformed the ways professors teach and students learn. The purpose of this study is to investigate the perceptions of onsite students (hybrid or blended mode) and of those taking the same courses on the Internet (online mode). To guide the study, a moderator-type theoretical research model was developed, out of which nine hypotheses were formulated. The model was tested in a field experiment. To collect data, we used a multimethod approach, that is, a Web survey involving open- and closed-ended questions. The sample was formed of 313 onsite and online students from eight undergraduate and graduate courses offered at the Faculty of Administration of a large Canadian university. The quantitative data analysis was performed using a structural equation

modeling software, that is, Partial Least Squares (PLS); the qualitative data were analyzed following a thematic structure using QSR NVivo. In this paper we present a summary of the qualitative results (open-ended questions).

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Assistive Technology and the Education Super Freeway: Don't Let Your Students with Disabilities Miss the Ride

Soonhwa Seok, University of Kansas, USA; Michael Fitzpatric, University of New Mexico, USA

Over the last 15 years technology has had a significant impact on educating students with disabilities. Although technology has immense potential to enhance the lives of those with disabilities, there is much room for expansion of technology use with some populations. The 1997 amendments of IDEA established new criteria and guidelines for consideration of assistive technology within the IEP for students with disabilities. IN addition, IDEA has lead to greater access to the general curriculum thus creating opportunities and challenges in the field of general and special education. This article provides the reader with a summary of (a) the current issues in the field of special education technology, (b) a brief legal perspective, (c) discussion of access to the general curriculum, and (d) current challenges preservice and practicing teacher face.

How could Web 2.0 be shaping web-assisted learning?

Gregory Fleet, University of New Brunswick, Canada; Peter Wallace, Innovatia Inc, Canada

This presentation will begin with a description of four key dimensions of Web 2.0. It will then explore these dimensions in relation to the current practices and types of online and web-based tools used in higher education settings. Universities need to provide students with an experience of innovative Web 2.0 services. Students are already conversant with the social networks created through Facebook, YouTube, and MySpace communities, and should find a web environment at universities that is familiar, not one that is top-down, administration-centric. The paper will conclude by proposing a simple model for understanding the roles of both learner and instructor, and the possible ways that the Web 2.0 environment impacts the activities of communication, collaboration, creation and assessment.

MATRIX MULTI-PLATFORM an e-Learning Environment to Manage Distributed Platforms and Heterogeneous Contents

Flavio Fontana, ENEA, University of Rome, Italy; David D'Arcangelo, Marco Di Domenico, ENEA, Italy; Daniele Vannicelli, ENEA External Consultant, Italy

On-line e-learning environments are very much dependent on context factors and their services. Context factors such as user's temporal status, location, content standards, and psychological aspects are important issues in e-learning services and delivery. Moreover, different e-learning systems have functionality as registration, login, courses catalogue, newsletter and others, designed and implemented with different standards that make the e-learning contents dissemination even more complex. The main idea of the Matrix Multi Platform (MMP) system is to design a meta platform to give the end-user with an unique educational portal and with a standard presentation of the educational contents. The MMP supports the end-users with a personal course catalogue, a simple course card, and an individual user area. The technical aim of the MMP project is to guarantee a satisfying integration between different e-learning platforms ensuring a simple and complete e-learning on-line portal service.

U.Te.A.S (Usability TEsting Advanced Software): an Innovative System to Test the Usability Level of Learning Management Systems and On-line Courses

Flavio Fontana, ENEA, University of Rome, Italy; Daniele Vannicelli, ENEA External Consultant, Italy

In this paper an innovative web application to manage on-line usability testing sessions is discussed. U.Te.A.S., ASP, AJAX and Javascript based, has been developed in the ENEA Usability Lab, Casaccia Research Center. The system integrates different functionalities used in the analysis of the human computer interaction. Operating like a virtual Usability Lab, U.Te.A.S. allows to analyse and to estimate the usability level of different systems, in particular, Learning Content Management System (LCMS), cooperative tools, authoring tools, learning objects and on-line courses. At this time, a first U.Te.A.S. prototype has been developed, and its experimentation has achieved optimal results presented in this paper.

Persuasion as Education for Computer Security

Alain Forget, Sonia Chiasson, Robert Biddle, Carleton University, Canada

Most organizations realize the importance of computer security, yet many struggle with how to teach and influence their users to behave securely. Despite existing research in new instructions and security measures, users do not create secure and memorable passwords. In an effort to teach users how to behave more securely, we present the Persuasive Authentication Framework, which applies persuasive technology to authentication mechanisms. Furthermore, we describe some examples of how the framework can be applied to existing authentication systems.

Introducing Peer Production into the Department of National Defense

Bruce Forrester, John Verdon, Department of National Defence Canada, Canada

The emergence of a networked society suggests a fundamental new avenue of human coordination and self-organization – peer production. Essentially, peer production combines computer-mediated network communication, social constructivism, and reciprocity. Peer production has recently exploded due to the Web 2.0 technology enablers and ubiquitous communication technologies. How does one go about introducing peer production technologies into large hierarchical organization? This paper explores the creation of a vision, defines and explains peer production, and describes some of the associated technologies. This is followed by brief descriptions of the lessons learned and their context. Challenges still to be answered: How do we create a "Need to Share" vice "Need to Know" culture? How do we encourage individuals to contribute to this new culture of need to share?

Implementation of the VelTIC hypermedia system of resources

Helene Fournier, Rodrigue Savoie, National Research Council of Canada, Canada; Claire IsaBelle, François Desjardins, Phyllis Dalley, Université d'Ottawa, Canada

In this session, the presenter discusses and demonstrates the inner workings of a web-based hypermedia system for cataloguing and distributing best practices for ethno-linguistic vitalization (elv practices); a system put into place for school principals in the promotion of the French language and Francophone identity construction in Canada and available at http://veltic.ca. Specifically, techniques, issues, and solutions related to data entry and tagging, publishing, and production of hypermedia resources for online sharing and learning in a community of practice framework are reviewed.

Broadening Women's Participation in IT: Computer Clubs n' Virtual Spaces

Lani Fraizer, Pepperdine University, USA

Information Technology (IT) is one of the top ten fastest-growing areas of job growth in the workforce. The U.S. Department of Labor and Statistics (2005) for example projects the employment rate will grow between 39.5 to 60.5 percent by 2014. Despite the increasing prospects of job growth and increasing opportunities, representation of women entering the field is limited. A huge gap still exists between men and women students regarding intentions to major in computer sciences. This paper outlines an outreach effort designed to increase student interest in computing disciplines through computer clubs. It also explores the use of virtual spaces, such as Second Life, as a means to motivate women's participation in IT. Virtual spaces hold many possibilities for transforming educational activities by providing a platform for an enriching interactive experience.

Community Building and Immersion: Student Clubs in IT and Nursing

Lani Fraizer, Cathy Deckers, Pepperdine University, USA

Today's workforce demands that students prepare for the complexity of the real world. Students are expected to diversify their portfolio and need stronger skills in areas such as leadership and teamwork. Consequently, educators face an increasing level of responsibility in finding new and better ways to introduce learning experiences that will create the employee who is able to demonstrate adaptive expertise. To help address these needs, we present student clubs, as a vehicle in which to foster student-learning communities and to connect students with experts in the industry. We also discuss how this model can be applied in the health professions, specifically in allied nursing. Today's nursing shortage has created a health care crisis that has called attention to the education and preparation of nurses nationwide. We explore how nursing students can benefit from student community clubs to help enhance their learning.

Leadership "In-World" Second Life – Can Your Avatar Learn to Lead?

Lani Fraizer, Farzin Madjidi, Pepperdine University, USA

Virtual spaces hold many possibilities for transforming educational and professional development practices by providing a platform for an enriching interactive experience. Can it also stimulate use of these technologies to prepare future leaders? It is crucial for students to learn to understand what it really takes to lead effective teams to remain competitive in the workforce. This roundtable will introduce audience members to the possibilities of using Second Life as a virtual world for leadership preparation and provides a glimpse of activities designed to introduce individuals to this environment.

Instructional Design: Methodologies, Communication, Affectivity and Learning

George França, Liliam Silva, Paulo Vasconcelos, Luciana Santos, Universidade Anhembi Morumbi, Brazil

Abstract: The present article discusses aspects of experience and perceptions of online mediation, with focus on the superior education and its particularities. It discusses the need of distance education methodologies, establishing relations between communicational and technological aspects involved in the teaching-learning process. It thus has the intention of discussing issues related to learning, passing through perceptions and methodologies, problematization of elements which compose the idea of knowledge building, didactics and scenarios of communication and learning processes, for, at last, going deep into the affective relations of online and distance communication.

The Case for Video Online Patient Exams to Improve Case-Based Learning at Midwestern University

Denise Freeman, Midwestern University, USA

Abstract: This article discusses the use of case-based instruction utilizing online video as a means of delivery as opposed to paper delivery. Online video instruction offers students opportunities to utilize real data and observe real patients with real pathologies and allows them an early start in the decision-making process of patient care. The video presentation offers many advantages to paper-based delivery and enhances case-based instruction. This article outlines the benefits of online video in case-based instruction to enhance the students' opportunities to independently practice patient care in a more realistic and hands-on approach.

Online Course Delivery—Not An Option!!!: Bringing Your Staff On Board

Kathleen Friery, Donna Herring, Jacksonville State University, USA

Although we stress technology skills as a must for our students before granting them a diploma or certification, faculty members sometimes lag behind the learning curve as we thrust new technology environments into our colleges. Yes, all faculty members have computers but there are those who still thrive in other environments. Due to their own feelings of insecurities, they may not provide an online component to coursework and may not require students to demonstrate a technology knowledge base through course requirements. This session describes how professors were required to deliver an online component to all courses taught and provides numerous ways to bring your faculty members on board with technology integration without brow beating them. Techniques for delivering "just in time" training and strategies for integrating eLearning into academic courses will also be shared.

Development of Web Video Archive System to Facilitate Pre-service Teachers' Reflection of Teaching Practices

Nobuhiko Fujihara, Naruto University of Education, Japan

We introduced Web video archive system for facilitating pre-service teacher reflective learning of their teaching practices and reported the results of the questionnaire to evaluate the system. Pre-service teachers could watch videos of their own teaching practices whenever and wherever they could use the Internet. Pre-service teachers and their supervisors could communicate to each other via the communication board function. We supposed these features would facilitate reflective learning of pre-service teachers. The results showed that users felt the system is effective. A part of them explicitly indicated that they could use the system to reflect on their own teaching practices. On the other hand, some of them found problems for the interface of the system. As future works, we'll improve the interface of the system and continue to examine its effectiveness based on teaching performances of pre-service teachers.

Community Learning Support System

Ryunosuke Fujimoto, Prefectural University of Kumamoto, Japan

This paper is a report on the prototyping community learning support system. Set to a university in this research. Paying attention to the community formed, it is an outline of a system with this paper which takes in the concept of a situation theory learning theory and a social network, and supports the community learning which extended the definition of CSCL and which built the web based community learning support system. The community learning support system is equipped with the operability in a university in which real employment is possible from evaluation result which reports the evaluation experiment about operability, and it was checked that a certain amount of learning effect can be expected.

Rethinking Analysis of E-Learning in Graduate Education Courses: An Activity Theory Perspective

Nobuko Fujita, OISE/UT, Department of Curriculum, Teaching & Learning, Canada

This exploratory study, involving 33 graduate education students, investigates ways of analyzing quality of collaborative dialogue beyond content analysis of individual contributions in asynchronous discussion forums. A group unit of analysis may be needed to adequately capture the processes of collaborative learning and knowledge construction in context. Activity theory (Engeström 1987; 1993) offers a structured yet naturalistic perspective to characterize these group e-learning processes. Discourse analysis of connected sequences of actions that multiple students make to advance group understanding is described. The results illustrate the complex interactions between individual and group understanding as students collaborate to solve problems of practice in teaching and professional development at all levels of education. This study concludes with a discussion of implications of using activity theory as an analytic and transformative tool for enhancing research and instruction in e-learning situations.

Service Platforms for E-Learning-supported Management Education

Roland Gabriel, Martin Gersch, Peter Weber, Ruhr-University Bochum, Germany

How can universities realize target group-specific innovative management education that is as well competitive in economic respects? The following paper shows a mass customization approach that is based on a so called service platform strategy, which aims at the systematic development and realization of hybrid learning arrangements. According options for standardization and individualization that need to be combined in this context are outlined, before an example of a potential outcome is presented in the form of a shortly realized international learning arrangement called "Net Economy". With the presentation of Net Economy the authors would like to invite interested parties to participate in an international (E-)Learning Network, that is being established currently.

Learning through Weblogs

Claude Gagne, Ryerson University, Communication and Culture MA program, Canada; Deborah Fels, Ryerson University, School of Information Technology Management, Canada

This study looks at students' perception of the use of weblogs as learning tools. Two Ryerson University courses in Information Technology Management that require student to use weblogs are taken as examples. Twenty two students from these two courses participated into an online survey concerning their blogging experience. The results of the survey demonstrate that the learning experience using blogs and the impact of blogging were perceived as being neither positive nor negative. The study showed a lack of clear communication between instructors and students that could have a negative impact on students' learning experience. The research suggests that implementing more collaborative aspects to individual blogs could be beneficial to students. Furthermore, the study indicates that most students perceive the content they inputted in a somehow negative way. Overall, the results suggest that blogs can be useful educational tools that can help students in their learning process.

Framing Quality in Evaluation Methods of an Online Degree Program

Albert Galloway, Seton Hall University, USA

Abstract: This paper reports on a study of the evaluation method(s) used by the administrators in an online degree program. Using ethnographic field study methods, this ongoing study seeks to discover effective evaluation processes that lead to quality improvement of degree programs. The study focuses on the quality pillars developed through effective practices collected by Sloan Consortium. Findings and recommendations are included.

Persistently Simple: Lessons Learned from Research on Adult E-Learning Courses

Ruth Gannon Cook, DePaul University School for New Learning, USA; Caroline Crawford, University of Houston Clear Lake, USA

Abstract: When a university embarks upon a course to offer classes and programs online, there are challenges that arise for even the most prepared. This study research utilized qualitative action research and student focus groups to assess which factors helped facilitate adult students' participation, retention, and course completion in four online courses. The review of research focused on adult learning theory and student motivation to see which factors might influence students' interest, participation, and retention in online courses. The results of the study pointed out strengths and weaknesses in the online courses that could be assessed to see which factors could be expanded in the future to increase student motivation and retention in online courses. The findings contribute to the body of research on student motivation and are of particular interest because they could provide valuable insights into which factors could reinforce persistence of adult learners in completing online courses and degree programs.

The Effects Of Online Module-Based E-Learning Approach On College Students' Attitude and Academic Performance

Leila Gano, University of the East, Philippines; Leny Dellosa, Centro Escolar University, Philippines

A quasi-experimental research is conducted to two comparable classes of College Algebra to determine the effects of the online-module-based e-learning approach of teaching on student's attitude and academic performance. A control group is taught by the traditional (face-to-face) method of instruction, and the experimental group is taught by the online-module based e-learning approach. However, online or not online, the course Mathematics is not everybody's favorite. A negative attitude towards mathematics plays an important role on student's learning. Attitude is relevant to a successful study that it can spell the difference between success and failure. The researcher feels the need of a new approach in teaching the course to raise student achievement and develop a favorable attitude among students towards mathematics. With the advent of online module-based e-learning approach in teaching, the researcher finds it necessary to determine the effects of this approach on students' academic performance and attitude towards mathematics.

Developing a Collaborative Infrastructure for the Implementation of Simulations for Clinical Professional Healthcare Education

Bernie Garrett, University of British Columbia - School of Nursing, Canada; Rena Van der Wal, Regional Director Staffing Innovation & Organizational Development, Vancouver Coastal Health, Canada

A Web based collaborative to support the development and sharing of simulated learning resources for health professionals has been designed and implemented in BC (www.bchealthsim.ca). The project was targeted at multiple healthcare professional groups. Six simulation modules were developed for use by educators contributing in the collaborative. These initial simulations examined skills for acute respiratory care.The hypothesis underlying this project was that a collaborative infrastructure provides an effective and more efficient approach to developing simulated, highly resource-intensive learning applications. An evaluation strategy was implemented involving educator questionnaires and focus groups, pedagogic dimension mapping, and student pre and post exposure testing, questionnaires and focus groups. The project has demonstrated significant advantages including improved intra-professional and inter-professional working relationships, more cost effective resource utilization and the establishment of common standard of practice for simulated learning.

Using Social Networking Concepts to Improve Student-to-student Collaboration in Online Courses

Norman Garrett, Eastern Illinois University, USA

Network theory tells us that a network with 10 nodes has 90 connections while a network with 15 nodes has 210. A 50% increase in nodes represents a 233% increase in connections! This power can be leveraged using some simple and available technologies as we create such networks (learning communities) in our online classrooms. If we implement specific teaching strategies designed to build and strengthen the connections in that network, the students can have a richer, broader-based learning experience. In this presentation we will examine the idea of classroom social networks and offer some suggestions for implementing a small learning community network among your students using freely available techniques and interactive technologies, including RSS feeds, blogs, wikis, and forums. These techniques are useful both in traditional and online courses and they serve to establish stronger connections between students and offer them a greater variety of learning style and content sourcing.

Mapping and Validating Diagnostic Reasoning through Interactive Case Creation

Genevieve Gauthier, Susanne Lajoie, Solange Richard, Jeffrey Wiseman, McGill University, Canada

This study presents an innovative medical case validation activity modeled on the case presentation practice commonly performed by physicians. Case development work for BioWorld (a computer-based learning environment) led us to note significant differences in the thinking involved in complex case solution. Data on the case creation phase demonstrated both validity and reliability issues when working with medical staff and students. This lack of consistency forced us to address the issue of validity and reliability of solutions in a more systematic manner. We are developing a methodology that addresses both knowledge elicitation as well as knowledge validation in the context of case creation in medical education. This study examines the effectiveness of explicit visual representations of diagnostic thinking as support tools for reflecting on and validating case resolution.

Digital Implementation of Visual Learning Strategies

Mark Geary, Vicki Sterling, Dakota State University, USA

PhotoStory and Cmap are free software programs which offer a new digital method of sharing that maximizes the effectiveness of visual learning strategies. You will be able to see varied examples of how the instructor uses these visual tools. The authors will lead the participants though possible steps in teaching with so all students can use the software. The presentation will show professors how they can use the software to assist their students in building prior knowledge in a subject. By using pictures from the web, they will be able to sequence a digital movie. Participants will then be guided through various ways of how they can help their students develop movies. Teaching strategies like semantic mapping and sequencing tools will be emphasized by the Cmap. Because multimedia development is motivating to students, they will spend quality time developing their digital movies and strengthening their long term memory.

Implementing Visual Learning Strategies with Photostory3 and Cmap (Note: Bring laptop for hands on)

Mark Geary, Vicki Sterling, Dakota State University, USA

PhotoStory and Cmap are free software programs which offer a new digital method of sharing that maximizes the effectiveness of visual learning strategies. You will be able to see varied examples of how the instructor uses these visual tools. The authors will lead the participants though possible steps in teaching with so all students can use the software. The workshop will show professors how they can use the software to assist their students in building prior knowledge in a subject. By using pictures from the web, they will be able to sequence a digital movie. Participants will then be guided through various ways of how they can help their students develop movies. Teaching strategies like semantic mapping and sequencing tools will be emphasized by the Cmap. Because multimedia development is motivating to students, they will spend quality time developing their digital movies and constructing knowledge.

The construct of a Learning Situation Application Profile

Oliver Gerbe, HEC Montreal, Canada; Beaulieu Martin, University of Montreal, Canada

The new program developed for Quebec secondary schools proposes a competency based approach to replace the simple acquisition of knowledge. Developed with contextualized, open and integrated Learning Situations (LSs), its assorted activities are likely to spark students' interest. To increase accessibility, facilitate localization and, ultimately, the sharing and re-use of LS, this paper initiates a reflection and proposes an LS-specific application profile that is compliant with recent work intended to standardize Learning Objects (LOs).

Enhancing Collaboration in Educational Forums

Marco Gerosa, Hugo Fuks, Carlos Jose Pereira Lucena, PUC-Rio, Brazil

Learning management systems usually offer forums as a communication tool. However, these forums normally offer just a typical implementation. In order to offer better support for collaboration, its communication, coordination and cooperation support needs to be enhanced. In this paper, some results of an action research conducted using the forum of the AulaNet learning management system are presented. The features were developed based on demands identified from the use of the system in online courses. The features were also evaluated from its real use. The results presented in this paper may be used by other developers in the enhancement of collaboration support of online forums.

An in depth learning object analysis

Marcello Giacomantonio, Wbt.it Srl, Italy

Many papers have been published in the last three years that bring together some important points in the field of e-learning: the opportunity of reutilising learning objects, the correlation between learning objects (LO) and learning activities (LA), the use of ontologies to define a common dictionary and to automate as far as possible the process of reutilisation of both LOs and LAs. Through an in depth analysis of the structural characteristics of LOs, this paper proposes a model to aid the integration and management of the ontology.

E-learning and the Judiciary

Benjamin Gianni, National Judicial Institute, Canada

A presentation within the Best Practices session would permit the National Judicial Institute to discuss e-learning in a unique professional context -- one in which continuing education is entirely voluntary and where learners are notoriously suspicious about new technology. Without the benefit of accreditation requirements, course fees, grades, or a degree program, the NJI has had to develop its electronic offerings based on "carrots, not sticks." The session will describe how we have approached the challenge, what we've tried (formats and delivery methods) and what we've learned.

Bridging the Digital Divide: An Online Technology Training Program for K-12 Educators in Economically Challenged School Districts

J. Elizabeth Gibbs, The University of West Alabama, USA; Randy J. Lane, Delta State University, USA; Linda J. Lane, The University of Alabama, USA

A growing, digital divide exists between those who have access and knowledge of how to use computers and the Internet and those who do not. Evidence of this divide is very prevalent in rural, economically challenged, K-12 school districts. An online professional development program, called the Technology Training for Learning Program, was created to deliver technology training to educators in three rural school districts in Alabama's economically challenged Blackbelt region. A series of online short courses and step-by-step tutorials about technology integration, software use, and technology troubleshooting was created to deliver online training to teachers in these school systems. This session will provide participants with (a) a description of this online professional development program, (b) a description of the instructional design of the program, (c) an overview of the training program and a demonstration of the online materials, and (d) early results.

Building School Web Programs: An Online Web Development Training Program for K-12 Educators

J. Elizabeth Gibbs, The University of West Alabama, USA

The need for web development training programs is a common problem in K-12 school districts. Many school districts are struggling to find successful ways to train their educators to create and maintain effective school web sites and class web pages. An online professional development program, called the School Web Leaders Program, was created to deliver web development training to teachers in the 20 schools in the Tuscaloosa City School System in Tuscaloosa, Alabama. This session will provide participants with (a) a description of this online professional development program designed to train K-12 teachers to serve as School Web Leaders, (b) a description of the instructional design of the program, (c) an overview of the training program and a demonstration of the online training materials, and (d) results for the program. No previous experience or prerequisite skills are required for those who attend this session.

Proven Strategies for Devising Cost-Effective Online Professional Development Programs for K-12 School Districts

J. Elizabeth Gibbs, The University of West Alabama, USA; Randy J. Lane, Delta State University, USA; Linda J. Lane, The University of Alabama, USA

Abstract: Well-designed e-learning programs offer immense potential for the delivery of professional development training to K-12 educators. Many K-12 school districts are discovering online training to be a cost-effective way to deliver instruction to their faculty and staff members. This roundtable session will discuss proven strategies for devising online professional development programs for K-12 educators following the ADDIE model of instructional design and incorporating best practices identified in current literature. Session participants will be asked to share their real-life experiences with online training programs. The ADDIE model of instructional design includes the systematic design phases of analysis, design, development, implementation, and evaluation. The examined strategies will offer insights into lessons learned by experts in the field of e-learning. This information may be used to help K-12 educators assess options and devise plans for their own programs.

Creating an Effective Training Curriculum for Faculty Who Teach Online

Ekaterina Ginzburg, Sacred Heart University, USA; Peter Chepya, Post University, USA; David Demers, Sacred Heart University, USA

The recent increase in demand for online education has forced many colleges and universities to adopt measures to ensure the quality of online offerings. To meet this challenge, Sacred Heart University has developed a unique Digital Learning Faculty Certification Program (DLFCP) to provide faculty training in the development and delivery of online courses. The DLFCP is an 8-week, modular program offered entirely online to our faculty 'scholars.' Each module focuses on key topics associated with the development and delivery of online courses, including instructional design for online learning, and provides faculty with an all-important student perspective and experience. At this session, we will review the curriculum of this highly successful program and discuss the challenges faced during the initial planning and development stages. We will also provide an overview of the successes we have had thus far with the program in transforming our online course offerings.

Bridging the Gap between Students's Skills and the ePortfolio

Marsha Gladhart, University of Alaska Southeast, USA

Electronic portfolios have created cognitive overload for many students and instructors in higher education as they deal with content and technology skills in a high stakes situation. Strategies and tools developed over three years of implementation at the University of Alaska Southeast (UAS) have bridged the gap between students' technology skills and the demands of developing an electronic portfolio. Examination of student responses and course evaluations have been used to drive instructional design as the UAS ePortfolio tool was piloted and improved. Improved structure and features of the university-developed portfolio manager, partnered with instructional tools, assisted students learning how to use the electronic portfolio tool, reduced student stress, and improved the quality of the portfolios.

Computer-mediated Workplace Literacy Project

Marc Glassman, Memorial University of Newfoundland, Canada

Abstract: The project entails the production of a series of computer-mediated instructional modules that will assist adult learners to enhance their functional and effective use of concepts and critical vocabulary related to three technical vocations (e.g, carpentry/woodworking, food services and general office computer knowledge). The rationale for this project is provided by the proponent's experience working with adults who wish to enter the workforce but who often possess low levels of literacy which serve as an impediment to employment. This finding is supported by the "Adult Literacy and Life Skills Survey" which identified that more than 50 per cent of survey respondents tested at or below Level 2 literacy, which would reflect a "…low or very low level of functionality with basic literacy and essential skills for the workplace." (Desjardins, Werquin, Murray, & Clermont. 2005).

Principles of Demonstrative Instructional Video

Peyton Glore, Macon State College, USA

Creating electronic tutorials with HTML, slide presentations or other authoring environments is time consuming. Capturing information in a real time presentation mode expedites development and decreases time invested while adding a sense of realism to electronic instruction. Instructional video can be, and should be, a quick and easy method for making information available to users. Methods discussed work well with demonstrating software applications, web cam presentations, or any topic that can be visualized or viewed electronically.

Monitoring E-Learning: Preliminary Results of Flanders

Katie Goeman, Free University of Brussels (VUB), Belgium

Recently, the European government called on all member states, among which Belgium, to work out national e-learning action plans in order to attain the latest ambitious iEurope objectives. Therefore, the responsible departments of education should have a clear view on the current state of the art. Unfortunately, although very useful for policy making purposes, no monitoring activities about ICT use in higher education were ever carried out in this country, not even in one of its regions. In this paper, we describe briefly three main use indicators of internet-based education and we present some preliminary results of the first broad-scale study within the Flemish learner and teacher population at all six universities. Focus is on the users' specific internet usage behaviour. The findings show current e-learning is wide spread, but is in general not applied to establish educational innovation.

Distant, Global and Mobile: re-thinking possibilities for learning through international collaboration and exchange

Shelley Goldman, Sarah Lewis, Ugochi Acholonu, Stanford University, USA

In a joint collaboration, four universities in the US, South Africa, Tanzania, and Uganda are establishing distance learning materials and frameworks of interaction in a course entitled, Local to Global: Collaborations for International Environmental Education. The collaboration innovates with mobile learning technologies to adapt and develop distance-learning courses across universities, international borders and mobile networks. The paper describes a networked model of pedagogy that is a re-thinking of the distance learning paradigm, and describes the development of the collaboration, the technical implementations, and participation outcomes of an iterative design process.

Virtual Tutor for an undergraduate program in Computer Engineering: Analysis and Design

Silvia Gonzalez Brambila, Mauricio Bastién Montoya, Universidad Autónoma Metropolitana, Mexico

In this paper we are going to introduce you to the design of a subsystem intended to support the tutoring process in the Basic Sciences and Engineering Division at the Azcapotzalco Campus of the Metropolitan Autonomous University in Mexico City, mainly through distance learning and the implementation of a virtual environment. The problems related to the academic - administrative information are expected to be solved once the subsystem is designed, which in its turn will lead to an increase of the retention rates, a reduction of the permanence time and an optimum control of our students' time. The Eight modules that integrate it will be explained, as well as their insertion in an academic support page aimed at the students.

Recommendation of Subjects of a Virtual Tutor for the Computer Engineering at the Universidad Autónoma Metropolitana

Silvia B. Gonzalez Brambila, Mauricio Bastién Montoya, Universidad Autónoma Metropolitana, Mexico; Josué Figueroa González, Universidad Autónoma Metropolitna, Mexico

In this paper we present the development and implementation of one module of the virtual tutor for Computer Engineering at the Universidad Autónoma Metropolitana in México City. This subsystem is actually in evaluation and its main purpose is help the students to select the subjects they can register in each quarter. This recomendation is based on the critical route of the curriculum and in the number of credits that the student desires to register.

Production of learning objects based on integral generative patterns

Simón Carlos González Flores, Rafael Morales, José Antonio Delgado Valdivia, María Elena Chan Núñez, Universidad de Guadalajara, Mexico

In this paper we describe a novel solution to the problem of reducing the production times and costs of high quality learning objects that consists in the pre-production of a collection of integral and generative patterns from which learning objects can be derived through simple editing of a configuration file and the attachment of a collection of media and information resources. Our patterns are generative because they are used to produce learning objects, and integral because they incorporate a competency-based approach to education with pedagogical, instructional, graphical and technological designs embodied in a standardised and configurable digital package. We describe our methodology for producing learning object patterns and our first experiences on producing learning objects from them.

Searching on the Web

Elias Goulart, Universidade Municipal de Sao Caetano do Sul - IMES, Brazil; Annibal Hetem Jr, Universidade de Sao Paulo, Brazil

The World Wide Web – WWW – has been largely used to search and select information resulting as one of its main uses the academic and professional activities support. This work shows a study about strategies of information search on the WWW and aims to analyze and compare the results with a similar study developed at Telaviv University. It presents nine possible searching ways and how they were used in both studies. As a result, it's presented the most effective ways and it's suggested better user training programs on the presented techniques.

We Made the Change - Can You? A Narrative of Experiences in Programme Design

Beverley Gower, Helen Nielsen, Gudrun Dannenfeldt, Waikato Institute of Technology, New Zealand

Abstract: This paper is a narrative account of the journey of a health lecturer, a science lecturer and an instructional designer in meeting the changing needs of health service delivery to post graduate nurses in New Zealand. The challenges included changing the design of the e-learning component of a 300 hour post-graduate children's health assessment course from content delivery to a student centred constructivist focus using asynchronous discussion forums. Making this change included the lecturers meeting challenges in relation to coordinating the delivery of 'hard' knowledge with 'soft' knowledge. This was an evolutionary process which required a paradigm shift in the lecturers' concept of teaching and learning

Providing Adaptive Courses in Learning Management Systems with Respect to Learning Styles

Sabine Graf, Vienna University of Technology, Austria; K. Kinshuk, Athabasca University, Canada

Learning management systems (LMS) are commonly used in e-learning but provide little, or in most cases, no adaptivity. However, courses which adapt to the individual needs of students make learning easier for them and lead to a positive effect in learning. In this paper, we introduce a concept for providing adaptivity based on learning styles in LMS. In order to show the effectiveness of our approach, Moodle was extended by an add-on and an experiment with 437 students was performed. From the analysis of the students' performance and behaviour in the course, we found out that students who learned from a course that matches their learning styles spent significantly less time in the course and achieved in average the same marks than students who got a course that either mismatched with their learning styles or included all available learning objects. Therefore, providing adaptive courses in LMS according to the proposed concept can be seen as effective in supporting students in learning.

E-Learning Through Games

Sarah Grafman, Muzzy Lane Software, USA

Computer games can be remarkable learning experiences. A good game must, by its very nature, capture player attention. To succeed in a game, players must acquire, apply, and evaluate information. How can we harness the power of games to serve educational goals? How can developers create games that are educational and engaging? How can educators integrate these games into their courses? In this session, Sarah Grafman, the Director of Education at Muzzy Lane Software, will speak about her work creating "serious games" for higher education and her experiences teaching an online course on Using Games in Education.

Problem-Based Learning and its Implementation in Computer Information Technology and Engineering Technology Classes

Nancy Grant, Daniel Ference, Community College of Allegheny County, USA

This paper reviews the Problem-Based Learning Model, as well as current research that have been conducted in this area. Problem solving, along with the Taxonomy of Cognitive Objectives by Bloom and the revised taxonomy- Taxonomy for Learning, Teaching, and Assessing are also discussed. The researchers presented real-life problems to students in computer technology classes in order for them to effectively apply the PBL model. In reviewing the documents produced by our students, it clearly showed the effectiveness in applying the PBL model. By using real-life problems when implementing the PBL model, we can be sure that we are requiring our students to apply higher order cognitive thinking skills.

The Evolution of Learning Management Systems: Continual Design and Usage

Nancy Grant, Community College of Allegheny County, USA

This paper discusses the design and usage of Learning Management Systems. Given the vital importance that information plays in various organizations, information systems must be designed by software developers, with key input from a variety of personnel (depending on the type of organization), including input by all of the individuals who will be using the system. The focus of the paper is to review the design and usage of LMS in distance learning courses in terms of their continual development.

Best Practices for Instructional Design and Educational Technology within Penn State Student Affairs

Andrea Gregg, Penn State Student Affairs, USA

This presentation will highlight instructional design and educational technology implemented in recent years within the Student Affairs division of a large, multi-campus, land grant institution. University Student Affairs encompasses career services, clinical health services, counseling and psychological services, diversity/special populations services, judicial affairs, and student life/student activities. It is a student-centered division based largely on face-to-face contact with students and technology is often regarded as something that gets in the way of this. Successful strategies for dealing with the challenges of effectively leveraging educational technology in such an environment will be discussed. Two key best practices are presenting technology solutions in a non-threatening and user-friendly way and when appropriate using the technology to go beyond what is possible in a face-to-face environment. Additionally, examples of online workshops and trainings used throughout the division will be discussed.

Promising Practices for Improving Student Learning in Online Learning Environments

Diane Gregory, Texas Woman's University, USA

This best practices paper will present the results of a series of qualitative analyses designed to determine the effectiveness of the instructional design and a variety of asynchronous discussion strategies used in a series of six masters courses in Art Education. The instructional design of these courses was initially based upon the social constructivist ideas of John Dewey, Jerome Bruner, and Lev Vygotsky. It was later expanded to include ideas based upon the work of Rena Palloff, Gilly Salmon, and the experience of this scholar-educator. The asynchronous discussion strategies include practices such as, context specific and functional role assignments, collaborative small group presentations that are presented in large group forums, contemplative practices such as meditation, mindfulness, journaling, drawing, as well as, student created and facilitated PowerPoint presentations. The results of these analyses indicate that these approaches are effective when used in combination rather than in isolation.

Evidence Gathering Online Repository (EGOR)

Debra Greig, Rodney Reid, ShirWin Knowledge & Learning Systems Inc., Canada

EGOR's purpose is to document the systematic review process, remove subjectivity, and provide a collaborative workspace during a systematic review. EGOR will assist you with your research personnel, information source collection, protocol development, screening, quality assessment, group discussion, and reporting. EGOR has been designed as a research and scientific tool. Systematic reviews completed with EGOR have a complete record of activities, allowing you to support your

conclusions, and allow others to follow the steps you took to your results, should that be appropriate. EGOR has been developed from lessons learnt from two previous research projects, the first of which was partially funded by the Worker's Compensation Board of Alberta and sponsored by the University of Alberta, School of Business and Faculty of Rehabilitation Medicine, and the second of which was partially funded by the Canadian Population Health Initiative (CPHI) and sponsored by the University of Victoria.

Perceptions of digital communication in the workplace - focus on organizational learning

Anette Grønning, Knowledge Lab, University of Southern Denmark, Denmark

How do employees perceive digital communication in their daily working life? This paper presents selected findings based on an online survey focusing on the perception and the complexity of email as an example of organizational digital communication. Perceived communication can be seen as part of the learning process. How do the employees manage knowledge sharing and learning within this frame? The subjectivistic approach is introduced in relation to learning processes in the company. This approach focuses mainly on the user's perception of the medium and the working environment. Objectivity, saliency as well as the choice-making process are the key concepts. What kind of problems can be identified in that connection? One picture becomes quite clear: Exploration of the email's potential for learning and for knowledge sharing in the organizational context is missing. Focusing on knowledge, emails can be seen as unexploited grounds for action and for knowledge sharing in the community of practice.

Analyzing lifelong learning student behavior in a progressive degree

Ana-Elena Guerrero-Roldán, Enric Mor, Julià Minguillón, Open University of Catalonia, Spain

The University offers official degrees and some courses in the same virtual environment for students or professionals who want to improve their knowledge and competences. The Computer Engineering degree is designed in several progressive degrees that offer an accreditation and a competency level. Some subjects are recommended as well as the other ones that are mandatory for obtaining a progressive degree. In this paper we analyze the curricula selection behavior of students enrolled into a Computer Engineering degree degree and we compare the two main available possibilities: one is following the preplanned "per semester" structure, and the other is following what is named "progressive degrees", which allow students to obtain certificates in several areas related to professional competences. Although this second strategy is supposed to provide a better lifelong learning experience, results show that students do not strictly follow it, mainly because of the difficulties of the proposed scheduling.

Adult Instruction and Online Learning: Issues, Reflections, and Recommendations For Practice

Patrick Guilbaud, Curry School - University of Virginia, USA; Bonnie Jerome-D'emilia, University of Virginia, USA

This paper discusses key learning perspectives and orientations in a proposed framework or approach for use in Internet-based adult instruction. Drawing from pedagogical and andragogical instructional paradigms, the framework suggests key tenets that practitioners should keep in mind in developing or evaluating online courses. The pace of development of Internet-based education has been break neck in the past two decades, while research and development of an educational framework specific to Internet-based learning has not been forthcoming. It is clear from the pervasiveness of Internet-based methodology for the adult audience that there is a need for some level of mastery of the online learning medium by anyone who is involved in adult instruction. Thus the inferences drawn from this analytical study to evaluate the utility of an Internet-based adult learning framework can be a useful lens through which to fully engage in the current developments in the field of Internet-based instructional design.

Generation Why? Designing Learning to Engage the New Workforce

James Guilkey, S4 NetQuest, USA

Technology is not only changing how we work, but also the complexion of today's workforce. Generation 'Y ' is entering the workplace at an ever-increasing pace and their expectations of learning are much different than past generations. Hand them a training manual and they will hand you a resignation. Ask them to sit through a two-week classroom lecture and they will ask you for a reference for their next job. Baby boomers grew up with television – generation 'Y' grew up with the Internet and the digital media that is now prevalent throughout our society. Good or bad, it will have an effect on how you train and develop your employees. This presentation will examine the profile of today's new workforce and discuss how training must change to meet their needs and expectations. Examples of technology-based gaming and simulations geared towards generation 'Y' will be presented (Healthcare and Financial Services) and the measurable results from these cases will be discussed.

The Students Attitude via Problem Solving in Online Cooperation: A CASE STUDY IN ASSOCIATE DEGREE IN INTERNET ASSISTED INFORMATION MANAGEMENT PROGRAM AT ANADOLU UNIVERSITY, FACULTY OF AÇIKOGRETIM IN TURKEY (OPEN EDUCATION FACULTY)

Salih Gümüs, Anadolu University, Open Education Faculty, Eskisehir, Turkey; Murat Ataizi, Anadolu University,, Turkey

Today, business enterprises are working with the assistance of internet in mobile offices. The data, common project management, and data circulation are realized over portal sites in companies. For this purpose, the employees must have teamworking and problem solving skills to finalize the project or to solve the problem in internet medium. One of the ways to achieve this goal is that the students of undergraduate and graduate programs must be trained with certain problems in teamworks in internet. This study serves for the research of student attitude in online education media during the case of cooperative homework studying. 111 Information Management Program's students have participated to the study.

Expanding the Impact of Learn-by-Doing Simulations in Corporate Training

David Guralnick, Kaleidoscope Learning, USA

While e-learning has become accepted in large companies as a standard option for training, most corporate e-learning has not produced the hoped-for performance improvement. Yet e-learning has a tremendous amount of unrealized potential to provide high-quality, educationally-sound, engaging training that improves employees' performance. Corpoate e-learning's lack of success seems to be due to the dearth of widely-publicized methods to teach skills needed by corporate employees, and by the perceived technical difficulty in creating engaging, effective e-learning such as simulations. In this paper, I describe a learn-by-doing simulation methodology to teach customer service skills, and an e-learning authoring tool based on that methodology that is easy for trainers to use, along with future generalizations of the method and tools to other skill areas.

Factors Leveraging the Collaborative Potential of Online Learning Environments

Tarkan Gurbuz, Middle East Technical University, Turkey

Advances in technology, indeed offers significant opportunities for creating powerful collaborative learning environments. It is stated by many researchers that there is a need for a broad research agenda to gain a better understanding of the social, affective, and cognitive processes involved in computer supported collaborative learning. This paper is intended to discuss the important factors leveraging the collaborative potential of online learning environments which would be helpful for improving classroom practices. These factors could be listed as follows: CSCL environment should be (1) beneficial for students' learning, (2) increasing students' motivation, (3) satisfactory for learner support, (4) promoting CMC, and (5) facilitating group work.

Building a situation learning community in math class using a online game

Chen Gwo-Dong, National Central University, Taiwan

This study has two purposes: first, to consider situation learning theory to create an Community of Practice based environment of educational stories online games. It is a game in math learning behavior based systems, and the school materials for teaching activities, to form the various aspects of the social context type of learning environment. Second, we propose a quantitative way of getting involved in the promotion entirely the evidence, including the flooding potential diagram, T-test, Pearson, Decision Tree. and so on. We therefore based on Data Miming steps Design of a tool called Message filter and integration of MS SQL Query analyzer to produce data. Finally, we designed a three-week experiment, six classes of participating students. The results showed a gradual fully-participant in the case, and to analysis of covariance - with the game-comparison site, Although the game group to spend more time, the progress is slower, but better results Solution.

General Poncelet meets the Semantic Web: a concrete example of the usage of ontologies to support creation and dissemination of eLearning contents

Genevieve Habel, MATI, Canada; Francois Magnan, LICEF-TELUQ-UQAM, Canada

The project "A theatrical perspective on projective geometry" is a multimedia eLearning initiative that aims at the di?usion of an online course on projective geometry and an historical theater play on the life of the inventor of this discipline: the french mathematician and engineer Jean-Victor Poncelet. We look at how we created an ontology to centralize all the knowledge of the project and what kind of bene?ts we received from this strategy by combining it with the right toolset.

Indigenous learners scratching their choice for learning.

Krys Haber, CSU, DEET, Australia

The objective of the experiment is to test the possibility of using Scratch programming language as a means to meet personal and educational needs of Indigenous students living in a very remote community. The experiment followed the methodology encompassing the educational theories of Papert, Negroponte and Kay as well as suggestions made by Maloney. The main results of the experiment are that all the students responded positively towards the Scratch approach. Scratch approach improved attendance, staying longer at school and on task. All the students became more enthusiastic towards learning in general and have improved their outcomes in all major learning areas. A number of students engaged in more complex programming. The main implications of the results are that Scratch can be recommended as a valuable educational tool benefiting the teachers and increasing the personal satisfaction and educational attainment of the students living in the remote Indigenous communities.

Ontology-based Modeling for Personalized E-Learning

Riadh Hadj M'tir, RIADI - LIRIS, France; Lobna Jeribi, ENSI, Tunisia; Béatrice Rumpler, LIRIS, France

In order to improve E-learning systems, we propose to model the user profile based on a profile ontology, and to create a rich learning area based on a domain model. In this paper, our proposition consists in describing a suitable representation of the proposed models. The profile ontology allows us to establish a suitable user model. The major contribution of the ontology model is to offer a coherent course structure. The system is implemented by a large learning memory based on an Ontology Formal Model. Thus, it enables to assist learners to choose a most suitable method and to widen their scope of training possibilities. Also, it offers the possibility to accurate user monitoring and evaluation during the learning process.

Empowerment Model for E-Learning

Nancy Hadley, Martin Guinn, Angelo State University, USA

Abstract: Empowerment is all about control. An empowered person is in command of the arena in which he/she is operating and has not only mastered critical concepts, but has the confidence in his/her own ability to problem solve in that arena. Although empowerment is at the heart of educational environments, it is often not achieved. Because students in e-learning environments are largely dependent on technology as a delivery system, there is an immediate need to ensure these learners are empowered in the digital environment before they can begin to learn through that delivery system. Efficiently designing empowering coursework as well as ensuring student control over digital information should be of utmost concern to all

educators, but particularly to e-learning educators. I have devised a four step Empowerment Model with the goal of moving the learner beyond the acquired curriculum to be able to problem solve in the subject area.

Topic Tree: Increasing the Accuracy of Item Retrieval

Hicham Hage, Esma Aïmeur, Université de Montréal, Canada

E-learning systems have made considerable progress within the last few years. Nonetheless, the issue of knowledge sharing still requires further consideration and development. The implementation of standards and specifications enable users to share E-learning and E-testing material, but remains unsatisfactory on several levels. In this work, we corroborate the need for further standardization in E-learning. In particular, we introduce the Topic Tree, a hierarchy of topics for exam questions, which allows tutors to better specify their search requirements and contribute at improving the accuracy of Information Retrieval. Finally, we report on the implementation and validation of our approach in the context of an E-testing system.

SC LIFE Plant Safari: Experiential E-Learning for K12 Teachers

Karen Hall, Kathy Kegley, Clemson University, USA

Abstract: This paper describes an innovative online class that sends middle school teachers on self-guided field trips to increase their knowledge of plants as well as collect assets for the development of an online repository of learning objects. The teachers select a public location (e.g., a state park or botanical garden) for study that is convenient and of interest to them. They visit their selected location several times during the spring semester to observe and photograph plants at various stages of development. As part of the course requirements, the teachers bundle plant photographs and related information supporting middle school science standards into reusable learning objects called Virtual Field Trip (VFT) Components. The VFT Components are housed in an online repository and serve as building blocks that can be shared among all South Carolina middle school teachers and used in a variety of educational contexts.

Participant Evaluation: Blended Learning Faculty Development Program for E-Learning

Junko Handa, Kinya Tamaki, Research Center for e-Learning Professional Competency, Aoyama Gakuin University, Japan

This is a report on the faculty development program that was conducted in the Research Center for e-Learning Professional Competency (eLPCO) at Aoayama Gakuin University in Japan. eLPCO designed the short-term faculty development program in a blended learning format for faculty in higher education in Japan. The program was conducted for 18 days, and included two face-to-face lessons and self-regulated learning (SRL) materials in June 2007. The purpose of this faculty development program was for faculty members to gain the basic knowledge of e-learning and to provide e-learning courses in higher education. Although the program was designed for faculty and staff in higher education, most participants were business people working in the e-learning field. This report shows the participants' evaluation of the faculty development program.

E-Learning in remote First Nations: The BC - Yukon First Nations' Health Network

David Harper, University College of the Fraser Valley, Canada

First Nations students are not as successful as the "mainstream" in post-secondary education in British Columbia. This session focuses on identifying the unique challenges these students face and illustrate important special considerations that administrators, teachers, and developers must consider to improve the success rate of First Nations students. Participants will have a better understanding of First Nations post-secondary education issues and some of the ways in which technological innovation can be used to improve educational outcomes of First Nations Students in our post-secondary system. This presentation would be appropriate for all involved in post-secondary education: administrators, teachers, course designers, and student support service workers.

Making Connections with Hybrid Classes - Benefits for All

Sheryl Hartman, Miami Dade College, USA

Can a hybrid course be used to challenge our students and optimally position emerging learners for education in the 21st Century? YES! This roundtable discussion will examine the experiences of designing and delivering customized hybrid courses. How students construct meaning and optimal educational strategies applicable to the hybrid environment will be explored. The goal is to pair the best features of face-to-face teaching with the best options of online learning to promote active and independent learning and reduce class seat time. The hybrid model forces the redesign of some lecture or lab content into new online learning activities, such as case studies, tutorials, self-testing exercises, simulations, use of real time/real world learning objects, and online group collaborations. An active human mentor/facilitator cements the learning journey with consistent reinforcement and feedback and reduces the isolation and anonymity some students may feel in a totally online environment.

Digital Life Moisling: Video Blogging as Web-TV for Underprivileged Kids

Joachim Hasebrook, Rangga Winantyo, Nils Schomann, ISNM International School of New Media, Germany

A Weblog including streaming video and photo galleries (video blog or vlog, for short) is described which helps young people in the socially underprivileged suburb of Moisling, a part of the hanseatic city of Luebeck (Germany), to express their own views, to develop their creative skills and to support their self esteem. Therefore, video entries to the vlog are created by the young people themselves under supervision of film professionals and supported by social initiatives. The vlog is using the digital story telling approach of "Digital Lives" in order to combine creative use of social Web-TV with social integration and crime prevention.

Web 2.0 Job Hunting: How Students Look for Jobs Online

Joachim Hasebrook, Ankit Saha, ISNM International School of New Media, Germany

In a field study we examined the use of online tools and services for job-hunting by students and faculty members at higher academic institutions. The survey results identify significant strengths and weaknesses of different facets of online tools and services when used in the job searching process. We find that students from some disciplines are more adept than others at effective use of online tools and services. Even though the overwhelming majority of participants identified themselves as heavy Internet users, there seemed to be a general lack of awareness of some developing web technologies such as e-portfolios. The article's findings we hope to contribute to more research into the development of an online platform which integrates the different facets of online tools and services found effective for online job hunting and to determine to what extent e-portfolios already satisfy the facets.

The demographic and cultural influence of Spanish on bilingual education in Texas

Rita Hauck, Fort Hays State University, USA

A preliminary analysis of the demographic and cultural influence of the Spanish language in Texas revealed an issue for consideration by educators and scholars: Schmid uses the term, "language-minority Americans," and reported that their number "has increased more than four times the rate of the overall population" (Schmid 4). The increase of Spanish spoken in homes relates directly to the call for increased bilingual education in schools.

Meeting the Challenge from Society, Creating New Learning Environments at Universities

Harald Haugen, Stord/Haugesund University College, Norway, Norway; Bodil Ask, University in Agder, Norway

Abstract: Many traditional universities are slow in meeting the demands for flexible and techno¬logy supported learning environments. What are the challenges and how can they be met without lowering the academic level or the requirements for research based learning? New information and communication technologies are important tools, but how are they now included and integrated into higher education? Experiences from several R&D projects are presented in this paper, suggesting some key elements for speeding up the process.

Instructional Design for Self-Directed E-Learning – Students' Experiences and Perceptions

Stefanie Hauske, University of Zurich, Switzerland

Even if e-learning is nowadays a common, integral part in higher education, teachers and students often retain attitudes that they have developed in classroom education settings. The quality of e-learning settings and online learning materials still remains an open question. This is particularly true for self-directed e-learning environments that require a thorough instructional design. This paper describes how didactical elements can ensure self-directed e-learning and gives insights into students' experiences with instructional online material designed for self-directed learning and how they perceived the learning experience. The paper ends with a discussion of the findings.

Teaching Large Classes: Increasing Learner Activity Using Wikis

Stefanie Hauske, Robinson Aschoff, Gerhard Schwabe, University of Zurich, Switzerland

In large classes teachers and students often encounter problems like lack of learning activities, lack of motivation, lack of profound feedback or lack of learning transfer. In this paper we present an approach to meet these typical difficulties by using a wiki-based collaborative e-learning scenario moving from a teacher-centred focus to a more learner-centred one. The evaluation and the final examination results indicate that the approach was successful in terms of learners' activation and learning outcome. Nevertheless, the evaluation also shows that students participating in this project did not appreciate the collaboration experience in general and valued it as time-consuming and less effective regarding the preparation of the final examination. The paper closes with the discussion of the project's findings and lessons learned.

Perceptions and Attitudes of Selected University Professors towards Online Distance Education

Norm Hays, Lee Allen, University of Memphis, USA

Many colleges and universities are hastening to answer the call of the growing number of online learners. Recent research, including Gibbons and Wentworth (2001) suggests that many colleges and universities are motivated by promising financial forecasts, while others are simply keeping up with peer institutions. Regardless of the reasons, the rush often results in significant aspects of the online distance learning paradigm being overlooked. The purpose of this research study is to identify the perceptions and attitudes of professors who have had experience teaching in a traditional environment and in an online environment at the University of Memphis. The study provides descriptive statistics and a qualitative analysis as to the perceptions and attitudes of professors toward online distance education. Additionally, this study may assist in identifying specific environmental characteristics of online teaching.

Online Education and Gender

Carrianne Hayslett, Heidi Schweizer, Sharon Chaplock, Marquette University, USA

Linguistics research demonstrates that men and women use language differently. The differences between men and women's use of language can lead to difficulties in cross-gender communication. As in face-to-face communication, distinctive gender-related characteristics can be found in computer-mediated communication. While the gender gap in technology use is closing, differences in communicative style may account for persistent gender differences in participation rates in computer-mediated communication. If discussions in moderated online education evidence gender differences, the consequences may be diminished learning and achievement for women learning online. This study seeks to answer the question, are there gender differences in the discourse and participation of students in moderated online education?

Enhancing a Collaborative Library Research Tool - BELL: The Business Ethics Links Library Clearinghouse

Gene Hayworth, William M. White Business Library, University of Colorado, Boulder, USA

This paper describes the collaboration between the business library at the Richard Ivey School of Business, University of Western Ontario, and the William M. White Business Library at the University of Colorado at Boulder. The focus of the project was to add Canadian content to BELL, a web research tool developed at the Boulder library. A study of the types of

searches conducted against the databases identified the need to add Canadian content to the BELL site. Out of an average 2,500 monthly page downloads, Canadian institutions were the sixth most frequent users, after the U.S., Australia, South Korea, Germany, and the EU. The author determined that adding content relevant to Canadian businesses and organizations would increase value to Canadian researchers and increase use from Canadian institutions. The results of the collaboration, still in its early stages, are presented and discussed.

E-learning and visualization – Bringing change to Adult Vocational Education?

Niels Henrik Helms, Knowledge Lab, SDU, Denmark

Using a R& D project within adult vocational education as case the paper addresses the following problems: The changed attitude of learners and the role of e-learning in work-based learning and education of low-skilled workers. We highlight the role of visualization and contextualization. The new tasks for teachers in this specific context. How to train teachers and develop colleges and enterprises to cope with these changes. Finally the findings of an evaluation of the project are highlighted.

Assessor Online Exam System

Nancy Hendrickson, Melanie Ruda, Seward Inc., USA

Assessor II is an exam tool developed by Seward Inc. that allows trainers, instructors, and administrators to quickly create and deliver assessments and exams. At this showcase, two Seward representatives will demonstrate Assessor's features for managing the exam site, selecting the exam characteristics, creating questions, registering users, assigning exams, and generating reports of learner statistics. They will also answer questions about pricing, licensing, and customizing the tool for an organization's needs.

Protecting Private Data inHigher Education - What Employees Should Know

Nancy Hendrickson, Melanie Ruda, Seward Inc., USA

In response to concerns for greater protection of private data on campus, the University of Minnesota worked with a private e-learning development company to develop the Public Jobs: Private Data online data privacy and security awareness training program for employees and faculty. The development process included an initial front-end analysis, the formation of a cross-functional core advisory team, and coordination of content writers representing the University's Privacy and Security Office, the Technology Support Center, and the Office of Information Technology. The web-based program consists of three primary courses for all employees and five additional topical courses for staff who work with specific types of data, such as student data. Courses include best practice recommendations, interactive exercises, and direct links to University data management policies and resources. Results of the training have shown improved levels of employee confidence in securely working with private data.

E-science, E-research and E-learning: New Perspectives for Graduate Studies

France Henri, Centre de recherche LICEF, TÉLUQ/UQAM, Canada; François Bédard, École des Sciences de la Gestion, UQAM, Canada; Nicola Hagemeister, Département de génie de la production automatisée, École de Technologie Supérieure, Canada; Ghislain Lévesque, Département d'informatique, UQAM, Canada; Kadri Boualem, École des Sciences de la Gestion, UQAM, Canada; Lysanne Lessard, Centre de recherche LICEF, TÉLUQ/UQAM, Canada

The quality of education for doctoral students is closely linked to the quality of the research they undertake. Benefiting from technological advances, new distributed and collaborative research practices can be witnessed. The concept of e-science has emerged and evolved to the concept of e-research. These concepts bring about a new research philosophy and the notion of collaboratory. Our research project aims to develop a renewed doctoral training approach and to facilitate researchers' adoption of new research practices which will then be reinvested in the training of future researchers. Three general objectives have been defined: the rethinking of instructional model and objectives of doctoral training, the development of new technology-enhanced research practices and their reinvestment in graduate studies, and the development of approaches and methodological tools to support the preceding objectives. This paper presents the results of the first of a three year project.

efolios for 21st Century Learners

Donna Herring, Kathleen Friery, Jacksonville State University, USA

In a recent conference presentation, Mark Prensky stated, "For today's kids to learn, engagement is more important than content." He continued, "Content won't help students learn throughout their lives, but engagement will."(Prensky, 2005). What better way to engage students than that of teaching through real-life, collaborative projects allowing students to publish via their learning efolio. This presentation will provide a practical solution for engaging students in their learning environment through web publishing that is easy, economical, and provides a safe working environment for students. The ePortfolio is Internet based and easily follows the student throughout his/her educational career. The ability to share documents allows for peer editing and teacher commentary. Student efolios will be shared as well as research collected in the project. Techniques for replicating the project will be available, including teacher training, student training, and portfolio development.

Teaching the INTASC Standards through Project-Based Learning

Donna Herring, Jimmy Barnes, Kathleen Friery, Jacksonville State University, USA

Thousands of college of education administrators make the decision each year to adopt LiveText as a tool for collecting unit and program data. The goal: to determine the degree to which candidates can demonstrate the standards of the conceptual framework for the college of education. In order to collect data, student work must be assessed making artifacts the key to data collection. This session will showcase how content was developed with two objectives in mind: 1) to teach the concepts necessary for developing artifacts that demonstrate the INTASC standards, and 2) to provide students with the

necessary skills for developing learning activities that integrate technology into the student centered classroom. The artifacts are designed to make the connection between the teaching and the technology. LiveText is the tool that makes it happen.

Creating Presence, Connections, and Community: Enhancing the "Human Touch" Online

Janette R. Hill, University of Georgia, USA

In a world that is increasingly digital, finding the "human touch" can be a significant challenge. This is true for business and social interactions, but is also true in online learning contexts. In this interactive presentation, the challenges associated with creating presence, connections and communities in online learning environments will be examined. Research and strategies for moving these ideas into practice will be presented. Opportunities for extending the work will be explored.

Student Learning Patterns in Online Classes: Growth in Popularity, Decline in Attitude

Robyn Hill, Peter Serdyukov, National University, USA

Over the last five years, there has been a significant increase in the number of students enrolled in online courses due to a number of factors, including: greater choice of programs and coursework; higher levels of comfort with the technology; and the inherent convenience and flexibility that online programs offer, especially for working adults. However, the lack of traditional lesson time constraints and direct face-to-face instructor interactions has fostered the often erroneous belief that online courses are "easier" than those offered onsite. This paper discusses problems that arise from this misconception, as well as practical solutions to counter them.

Transitioning from Video-based Delivery to Totally On-line Delivery (TOLD): One University's TOLD Story of Infrastructure Assessment and Needs

Susan Hillman, Martha Corkery, University of New England, USA

This paper is a self-reflective case study of the infrastructure assessment and needs that facilitate the transition from a video-based distance education program to a totally on-line delivery (TOLD) program. Insight is provided with respect to initiating a systemic needs assessment from the micro to the macro level which is applicable for any university moving to TOLD. In addition, topics most pertinent to a transition to TOLD are discussed around four areas: outsourcing possibilities; changing the culture of isolation within the university; challenging the traditional structure of universities; and, changing expectations for faculty and the necessity for professional development.

Blended Learning Through Videoconferencing

David Hinger, University of Lethbridge, Canada

Educators are frequently looking for new ways to expand distance education opportunities to students in rural and remote locations. Videoconferencing is rapidly growing as a premier tool to minimize distance barriers and increase opportunities for continuing education. In January 2005, the Faculty of Education at the University of Lethbridge enrolled a cohort of students from the Peace River School District in the University's first graduate level videoconferencing blended learning environment. These instructors, administrators, and students were the participants in this multi-methodological study to evaluate student and instructor perceptions of using videoconferencing in a blended learning environment, and establish best practices for future course offerings.

Developing a Community of Videoconference Users

David Hinger, University of Lethbridge, Canada

Videoconferencing in the province of Alberta is creating increased learning opportunities for Alberta educators and students. The VcAlberta.ca website has become a central support for increasing the quantity and quality of educational videoconferences in the province of Alberta. The site has been designed to evolve over time to meet the needs of the community of users. Using a variety of tools, links, articles, and online communication tools VcAlberta.ca actively engages, builds and supports the Alberta videoconference community.

Promising Practices in Videoconferencing

David Hinger, University of Lethbridge, Canada

In this interactive session participants will experience the research results and promising practices for the use of videoconferencing in teaching and learning. The session will feature video clips and images of interactive videoconferences. Discussion will include lessons learned from videoconferencing teachers for maximizing learning and ensuring success. The presentation will cover a wide variety of classroom opportunities for broadband videoconferencing including full course delivery, guest experts and collaborative classrooms.

Context-sensitive Prediction in Artefact-based m-Learning Environments

Christian Hoff, Patrick Gratz, Steffen Rothkugel, University of Luxembourg, Luxembourg

In artefact-based mobile learning environments users annotate and interlink different learning materials (documents) through Artefacts. The artefact space built upon a set of documents describes the relationships between them. These connections are analyzed to aggregate a similarity matrix used in collaborative filtering (CF) to recommend learning materials based on experiences from similar users. However, these recommendations do not consider the context the user is currently working in. This paper introduces context-sensitive predictions for learning materials reflecting the context of the user for a better learning experience.

An Experimental Player/Editor for Web-based Multi-Linguistic Cooperative Lectures

Helge Høivik, Oslo University College, Norway

Based on the concept of the four-fold relationship between producer, tool, product and productive process as core to learning in the knowledge economy, this paper presents the features of an experimental on-line presentation package for cross-institutional collaborative lecturing in multiple languages. Practical experiences from a first test-run are also summarized.

New Grammars of Learning: Virtual Learning Environments as Operational Artifact and Discourse Object for Textual Transparency and Group-oriented Agency.

Helge Høivik, Vibeke Bjarnø, Tengel Aas Sandtrø, Oslo University College, Norway

Virtual Learning Environments have met with limited pedagogical success, but many of the early adopters have by now gained enough experience to pinpoint possible areas for improvement. After defining the concepts educational transparency and group versatility this paper provides an empirical evaluation of the affordances towards collaborative work in student groups as offered by one commercial VLE. Random selections of all student groups from three out of seven departments at one European institution of higher learning are classified according to their manifest internal communication structure. In addition to cross-departmental comparisons, the findings are also compared to a light-weight and in-house developed solution that was expressly designed to support transparency in versatile student groups. Our findings indicate that technical artifacts play a role, but subordinate to the pedagogical and social-cultural "grammar" of the particular learning environment.

Creating a Communally Constructed Digital Repository: Exploring issues in Accessibility and Sustainability of Online Research Databases

Bryn Holmes, Concordia University, Canada; John Gardner, Queen's University Belfast, UK

Our access to data in the age of information is truly phenomenal. Finding the information you need when and how you want it is more problematic - enter digital repositories. Traditionally the prerogative of libraries, the creation and evaluation of a dedicated 'electronic repository' of research and related resources is now potentially within the remit of many organizations including national bodies, special interest groups and universities. Also, importantly, many educators now seek to be part of the process of generating new knowledge, either through their own authorship or as part of professional organizations. The key for any repository is to provide the best possible platform for its members to retrieve and distribute knowledge. We seek to explore underlying issues of access and sustainability in the creation of online repositories, present a case study of feasibility research conducted in Northern Ireland, and conclude with a series of recommendations.

To Improve Teachers' Understanding in Integrating Technology into Teaching: An Alternative Instructional Model with Emphasis on Reflection

Yi-Chun Hong, The University of Georgia, USA

This study proposes an alternative instructional model to support teachers' learning in integrating technology into teaching practice. Belief in the effectiveness of learning with design, involving teachers directly in the instructional design process is proposed to help teachers achieve deeper understanding on technology use in the classroom. However, the design problem is a type of ill-defined problems. Reflective activity is regarded as an important element to facilitate teachers' process in learning design. Therefore, the proposed model, including five phases, is centered on reflecting ongoing design process, instructional effectiveness, as well as the interactions among learners, contexts, and technology use.

Collaborative Example Authoring System: The Value of Re-annotation based on Community Feedback

I Han Hsiao, Peter Brusilovsky, School of Information Sciences University of Pittsburgh, USA

Learning from examples is a common and powerful approach when mastering the art of programming. In our classroom studies of WebEx and NavEx, students highly praised the systems. However, the broader dissemination of this approach was not very successful due to the lack of content – annotated examples. This paper presents the study results in example-based programming learning by annotating examples. The classroom study confirmed that community successfully filtered out good and bad annotations and improved the quality of the annotations. In addition, the annotating example assignment was perceived highly helpful in understanding.

Collaborative Language Learning between Taiwanese students and Americans through Videoconferencing Activities

Yi-chuan Jane Hsieh, Ching Yun Univerrsity, Taiwan; Yu-Chih Ken Chang, Wen-Cheng Hsu, Chung Yuan Christian University, Taiwan

This study focused on the intercultural communication between Taiwanese college students and American native English speakers by means of synchronous and asynchronous technologies, such as videoconferencing and online discussion forum. We investigated the educational value, usefulness, and acceptability of technology-related language learning tools (i.e. email, discussion board, videoconferencing), and to what extent these tools facilitated the adult language learners. In addition, the learners' and instructors' perceptions of such kinds of learning tools were also explored. The collected data included pre-and post- videoconferencing activities questionnaires, evaluation sheets after each videoconferencing activity, interview transcripts, video recordings, and the researcher observation journals. The results of the study were fruitful for educators in selecting alternative learning tools to facilitate English language learning.

Data Visualization and Science Teaching

Richard Huber, University of North Carolina Wilmington, USA

It is not uncommon to have multiple agencies collecting water quality data on a stream or river. Often this data involves different parameters, different sample sites and a variety of sampling frequencies. Simply placing this data on multiple Excel spread sheets makes it difficult, if not impossible, for teachers and policy makers to use. Using data from three agencies we have developed and a model data visualization tool (DVT) teachers can use to easily and effectively utilize this data. This tool is free and readily available to the public at: http://www.uncw.edu/riverrun/JavaVersionApplet.html

Data Visualization Tools: New Interactive Internet Resources to Facilitate Scientific Inquiry

Richard Huber, University of North Carolina Wilmington, USA

This paper presents a case for using Data Visualization Tools (DVT's) to manage and interact with massive sets of environmental data. Thus facilitating scientific inquiry as called for in The National Science Education Standards. The focus of this presentation will be on applications for grades 4-14. Two categories of DVT's will be demonstrated: (1) sites that provide simulation of scientific equipment and resources and (2) sites that allow students to interact with large educationally relevant databases

Needs assessment of the mobile learning of adults

Ming-Yueh Hwang, Hsiao-Tieh Pu, Chien-Cheng Hsieh, Yi-Fang Lee, Chi-Lun Chung, Chun-Hui Yang, National Taiwan Normal University, Taiwan

This study aims to understand the needs of the adult for mobile learninig in terms of content, functions, services etc. Furthermore, the mobile learning system model is draw from this study. Several methods are used to collect data for this study including survey, focus groups and in-depth interview.

Designing and Improving Learning Environments for Creativity in Engineering

Norio Ishii, Aichi Kiwami College of Nursing, Japan; Yuri Suzuki, Takashi Fujii, Masanori Kozawa, Hironobu Fujiyoshi, College of Engineering, Chubu University, Japan

Since the 2004 academic year we have been working on lesson designs based on approaches from cognitive science to allow students to more effectively master the knowledge and skills related to creative activities. In this paper, we report a course in creativity using robot programming, the changes in the 2005 course based on 2004 results, and the outcome of the course. As a result, we confirm that (1) the number of uploads of activity data from students have increased in the 2005 course, (2) students' reflection sheets have become more detailed, and (3) their volume of information have also increased.

Automatic Creation of Vocabulary Learning Materials from Short Movies

Masatoshi Ishikawa, Kazunori Hasegawa, Satoko Amemiya, Keiichi Kaneko, Haruko Miyakoda, Wataru Tsukahara, Graduate School of Engineering, Tokyo University of Agriculture and Technology, Japan

We have developed a system to produce learning materials conveniently to acquire foreign vocabularies. Being fed a five-second movie for a word, the spelling and the meaning of the word by an instructor, the system automatically generates a learning material. As a result of an experiment, we could obtain the same learning effect as the materials that the instructors produced by operating the movie editing software directly. In addition, we also report the result of investigation about the learning effect in case that the learners created the learning materials by themselves.

The automatic lecture recording system utilizing screen mixing technology:Application in higher education

Tomoki Itamiya, Keio University Graduate School of Media and Governance, Japan; Mizuho Iinuma, Hiroaki Chiyokura, Keio University Faculty of Environment and Information Studies, Japan

Although there are various lecture recording systems, they still have many problems. For instance, the type of lecture material which can be recorded is limited to PowerPoint Slides and recording process needs subsequent editing work. We developed a system which overcomes such limitation. The features of this system are threefold: 1) installation of software is not needed for a teacher's PC, 2) subsequent editing work is not needed 3) high definition recording is possible. We used our system for three years in actual university lectures. The study shows that its validity can be proven.

ICT As Tool To Promote Student Learning In Macedonia

Vasil Ivanoski, Pedagogy Faculty, Macedonia

There is currently a trend toward the development of methodologies to measure Information and Communication Technology (ICT) curriculum integration and its resultant impact on student learning in our country. Simplistic, negative correlations between numbers of classroom computers do little to illuminate the full impact of ICT on teaching and learning. However, attempts at more sophisticated analyses are not problem free and raise issues of methodology and definition. Most educational technology experts agree, however, that technology should be integrated, not as a separate subject or as a once-in-a-while project, but as a tool to promote and extend student learning on a daily basis. The challenge, of course, is in finding ways to use technology -- and to help students use it -- that don't take time away from core subjects.

Online Competency-based Teachers College: Western Governor's University

Alisa Izumi, Heather Dodds, Western Governor's University, USA

Western Governors University (WGU) maintains a Teachers College with vibrant and growing initial- and post-licensure programs in elementary and secondary education. We have more than five hundred students enrolled from all across the nation in mathematics education, one of the largest enrollments in the U.S., and we are growing swiftly. As a competency-based institution, we develop lists of 'course-sized' competencies and objectives for which the students must demonstrate understanding by performing tasks, writing analytical papers, and taking exams. As a distance-education institution, we face unique challenges addressing mathematics and science content mastery and the development of positive mathematics and science teaching philosophies in our students, as well as placing initial-licensure students in field experiences and student teaching. WGU teacher educators will explain how we successfully meet these challenges and how we fulfill our mission to improve quality and expand access to credible post-secondary educational opportunities.

Usability Evaluation Study of Malaysian Smart School Courseware: The Effectiveness of JRK Evaluation Technique Compared to Empirical Study

Azizah Jaafar, National University of Malaysia, Malaysia; Hasiah Omar, Universiti Teknologi Mara Terengganu, Malaysia

Usability evaluation methods are used to evaluate the interaction of the human with the computer for the purpose of identifying usability problems to increase usability. The purpose of the research was to determine the effectiveness of analytical evaluation technique that was designed, developed and named as Jalan Rentasan Kognitif (JRK) evaluation technique. This evaluation technique was conducted on thirty-seven surrogate users using the Malaysian Smart School

Mathematics courseware. The usability results were then compared statistically with the empirical method of usability evaluation called Task Analysis Exploratory through Observation using video camera (TAEO). Usability indicators used in the study were usability problems and users' satisfaction. The study showed that the effectiveness of the two techniques was quite similar if they were used independently during the evaluation process. The usability indicators obtained in the study could be used as references.

From Learning Technology to Integrating Technology: Current Practice and Recommended Directions

Pawan Jain, John Cochenour, Smita Jain, University of Wyoming, USA

This paper reports the findings of a study conducted on pre-service teachers enrolled in a teacher preparation course: "Teaching with Micro-computers", at a major rocky mountain university. Findings indicate that learner characteristics- age and gender are insignificant in predicting the subject's intent to use technology score whereas pre-service teachers' major significantly influence their intent to use technology scores. The study also indicates that pre-service teachers' intent to use technology increases with their computer experience, which was measured as the number of computer-based courses enrolled and number of hours spend on computers per week by a pre-service teacher, but after a particular level of experience, intent actually starts declining. This finding can be very helpful in effectively designing the technology integration courses for pre-service teachers.

Technology Integration: Best Practices, Concerns and Barriers in Urban Schools

Manisha Javeri, California State University, Los Angeles, USA

This paper will allow the audience to view a unique kaleidoscopic pattern of technology integration practices in the context of diverse and multicultural urban setting of Los Angeles. This research studies best practices, concerns, attitude toward technology, barriers and challenges with effective technology integration within urban K-12 schools. The focus of this research will be on applying Roger's theory of diffusion of innovations (1995), Concerns Based Adoption Model (Hall and Hard, 2006), systems theory (Banathy, 1996) and post-modern literature on best practices in technology integration and human performance to provide practical, long-term, sustainable, and holistic solutions to the challenges in technology integration in urban schools. This research will directly inform classroom practices and policy decisions in technology integration. Further this paper proposes practical e-learning solutions and online collaborative strategies between the urban K-12 schools and higher education.

Policy Evaluation on Technology Integrated Instructions of Junior High Math and Science Teaching in Taiwan

Tsung-Hau Jen, Science Education Center, National Taiwan Normal University, Taiwan; I-Chia Chao, Policy Research, Evaluation, and Measurement Program, University of Pennsylvania, USA

Data of 6,150 math and science teachers nested within 681 junior high schools was drawn from 2003-2004 Taiwan School and Staffing Survey, conducted by Science Education Center of National Taiwan Normal University. Multilevel logistic regression was adopted to examine the effect of policy that provides inservice trainings for teachers to learn technology integrated instructions from both individual and institutional perspectives. At the individual level, results revealed that teachers who have ever participated in training activity adopted the technology integrated instructions significantly more than who have never attended training in the past three years. At the institutional level, result identified the contextual effect of schools' inservice training participation rates being a powerful predictor. Suggestions are recommended for educators and policymakers to make influential strategies at both individual and contextual level to change teachers' technology integrated instructions.

"Lego Storyboard": Building Digital Stories

Jennifer Jenson, Nicholas Taylor, York University, Canada

This paper documents the development and small-scale implementation of "Lego Storyboard", an XML and Flash-based tool for the creation and publication of web-based, multimodal stories – particularly those around sensitive and "dangerous" topics in formal schooling. Originally conceptualized as a continuation and extension of an earlier stop-motion animation tutorial, "Lego Storyboard" features customizable and dynamic palettes of background images, objects, characters and text bubbles, and may be more readily described as a resource enabling learners to create their own content than as a tool for the online "delivery" of content.

KEA - A knowledge management system for Mathematics

Sabina Jeschke, University of Stuttgart, Germany; Nicole Natho, Olivier Pfeiffer, Technische Universität Berlin - MuLF, Germany; Marc Wilke, University of Stuttgart, Germany

Knowledge contained in digital lectures and articles used on the Internet, is creating new challenges for knowledge management systems. In addition, automated extraction of knowledge from natural language texts is a technical challenge that remains largely unsolved. But mathematical texts possess a distinctive structure. Taking advantages of this structure, KEA extracts mathematical relations from texts, creates an ontology of each single text, and integrates them into a knowledge base. This knowledge base is the background of an enhanced retrieval system. Responses of this retrieval system are user-adaptive text- and visualized-based. Possible applications for such a system are a mathematical encyclopaedia, context sensitive library search, intelligent book indexes and e-learning software.

Learning Communities and Mentoring - Why Are Individuals in Corporate America and Education so Excited about these Concepts?

Marcia Johnson, Delaware County Community College, USA

This paper explores the concepts of mentoring and learning communities in both corporate and educational settings. In particular, it looks at how such concepts are being applied in these settings and what outcomes can be expected. Research

has shown that having a mentor can change an individual's life. By further formalizing the mentoring process and forming learning communities, true exchanges of ideas can occur, and the learning process can be enriched for all members within the community. When traditional boundaries are crossed and models of mentoring and learning communities are examined from both business and educational settings, multiple models for forming mentoring programs and learning communities can be found and shared.

Web-based Corporate Training: Some Key Success Factors

Luiz Antonio Joia, Getulio Vargas Foundation, Brazil

Brazilian companies are increasingly turning to Web-based corporate training by virtue of the fact that they need to train their employees within tight budget constraints. However, most companies do not know what the critical success factors in these endeavors are. Therefore, this article seeks to investigate some key success factors associated with such digital enterprises. In order to achieve this, the multiple case study method is used, whereby two cases leading to opposite outcomes – a success and a failure – are analyzed in depth. Comparisons were made of two cases, both conducted within the same major Brazilian company. The conclusions reached were that "Goal Orientation", "Source of Motivation", and "Metacognitive Support" were three critical dimensions in web-based corporate training.

Emerging Research Questions: Social Presence and its Relevancy to Cognitive and Affective Learning in an Asynchronous Distance-Learning Environment

Brenda Jolivette-Jones, Ph.D., Lee College-Huntsville Center, USA

This article examines the literature on the theory of social presence and its relevancy to cognitive and affective learning in an asynchronous distance-learning environment. With the evolution of distance education, colleges and universities have found themselves on the cutting edge of an unprecedented new era in online learning with asynchronous learning being perhaps one of the fastest growing areas in higher education today. In an effort to gain insight into effective instructional strategies for the design and development of courses, this review explores the relationships between student perceptions of self and others and how these perceptions influence their cognitive and affective learning outcomes. Implications for each role are discussed and conclusions and contributions to new knowledge in computing in higher education are drawn.

Research Results from BC's Connected Learner's Technology Projects

Lara Jongedijk, University of Calgary, Canada; Elizabeth Childs, BCEd Online, Canada

What factors create an effective online learning environment? This session will highlight the overall research results to date from the 9 Connected Learner's Technology Grant Projects across BC. These projects profile the lessons learned and the successful design elements noted across all projects to inform "A Model of Effective Development, Implementation and Delivery of Online Content". The technology involved across 14 school districts includes: the use of webcasting, web-conferencing, synchronous courses using Elluminate Live, use of Smartboards, online tutoring and data archiving. If you are an educator looking to set up or improve existing Distributed Learning courses in your school/district, this session will be very useful in profiling key local research that will help you to make informed decisions when planning and implementing similar technology solutions your own educational setting(s).

Take Your Online Courses to the Next Level - Master Online Teacher Certification

Jo Ellen Jonsson, Weber State University, USA

Weber State University (Ogden, Utah) has developed a Master Online Teacher Certification (MOTC) program to assist professors in cultivating exemplary online courses. This certification program includes face-to-face instruction, hands on training, and a supplemental online course. The faculty members selected for this program learn valuable tools and concepts to increase the interactivity and pedagogical expertise of their online classes.

Construction and Validation of a Motivation Scale in e-Learning environment

Young Ju Joo, Na Young Kim, So Na Kim, Hyun Kook Cho, Ewha Womans University, Korea (South)

The purpose of the present study is to develop a motivation scale to measure level of motivation for government employees in e-learning . Based on the results of a literature review, three dimensions of learners' motivation related to performance were identified; 1) academic self-efficacy, 2) task value, and 3) perceived choice. The study was conducted with eleven items and administered to 290 learners. For items analysis, EFA(Exploratory factor analysis) was performed with 145 participants in Study 1. In order to validate the scale in Study 2, CFA(Confirmatory factor analysis) were conducted to the last 145 participants. This research reports the reliability and validity of the new scale. A follow-up study is in progress to identify the relationship between motivation status and learning outcomes.

A semantic-web based framework for adaptive selection of learning objects during the authoring process.

Anusha Joshi, Asian Institute of Technology, Thailand; Marco Ronchetti, Dipartimento di Informatica e Telecommunicazioni, Universita di Trento, Italy; Joseph Sant, Sheridan Institute for Technology and Advanced Learning, Canada; Vilas Wuwongse, Asian Institute of Technology, Thailand

Semantic Web technology has been proposed as a key to enhance several aspects of e-learning, such as annotation and adaptation to the students' needs. Based on the same technology, we propose an approach to assist teachers in the process of selecting learning objects to build their own courses. We explicitly take into account teacher's knowledge, experience and teaching style to maximize the likelihood of finding the best suited teaching material.

Parent-Teacher Computer Mediated Communication in Public K-12 Schools

Susana Juniu, Montclair State University, USA; Jiwon Shin, Catherine Snow, Wynta Nivens-Wilb, Teachers College, Columbia University, USA

Parent-teacher communication is crucial to children's education. The literature reveals that parents' involvement in their children's education improves outcomes in areas such as learning, attendance, behavior, and graduation rates. Increased and

meaningful communication between home and school is likely to enhance parent involvement and consequently supports students' learning. Schools are using various forms of technology to increase school/home communication, including voice mail, e-mail, school and classroom websites, and web access to individual student information such as attendance, grades, and student portfolios; however, this use is not consistent or widespread. This paper examines the most prevalent barriers to parent-teacher communication in a K-12 educational setting and explores various communication options to improve parent-teacher communication and describes the most prevalent communication needs for parent-teacher communication.

Informal learning by non-posters in virtual communities. Preliminary theoretical considerations and explorative case studies.

Nina Kahnwald, Technical University Dresden, Germany

Informal learning in virtual communities is usually modeled according to Wengers concept of "Communities of Practice". In this perspective, learning processes are closely related to active participation. Thus, community-members who do not, or hardly ever participate actively, so-called non-posters or lurkers, are generally ignored by educational research, although they constitute the majority of users in mailing lists and message boards. In this paper first results of an explorative study on individual lurking strategies are presented and it is discussed to what degree the behaviour of lurkers can be seen as having an impact on individual learning strategies, integrating new concepts of networked learning.

Rural Wings - supporting e-learning in remote areas by satellite technology

Nina Kahnwald, Thomas Köhler, Technical University Dresden, Germany; Rodoula Makri, Nikolaos Uzunoglu, Institute of Communication and Computer Systems, Greece; Henrik Hansson, Ken Larsson, Stockholm University, Sweden; Paul Mihailidis, University of Maryland, USA; Sofoklis Sotiriou, Ellinogermaniki Agogi, Greece; Menelaos Sotiriou, International Environment and Quality Services S.A. (Q-PLAN), Greece; Pavlos Koulouris, Ellinogermaniki Agogi, Greece

Rural Wings is an ambitious wide scale international research project on e-learning through satellite telecommunications. The project uses DVB-RCS satellite technology in order to provide broadband e-learning-services for rural and isolated areas in thirteen countries all over Europe. It is aimed to support the development of a "digital" culture in rural areas and to support formal and informal learning activities by various e-learning applications and scenarios in different learning contexts such as schools, workplaces and homes.

How Can Hybrid Courses Designed with Socio-Constructivist Design-Principles Promote Learning in Higher Education?

Yael Kali, Rachel Levin-Peled, Yehudit Judy Dori, Technion - Israel Institute of Technology, Israel

This research explores the learning that took place in three hybrid university-level courses in education, which were designed according to three main design-principles: (a)engage learners in peer instruction, (b)involve learners in assessment processes, and (c)reuse student artifacts as resource for further learning. These principles were employed in different manners according to the goals, contents, and target audience in each of the courses. About 40 graduate, and 260 undergraduate students participated in the study. Data-sources included collaborative and personal artifacts in the courses' sites, researchers' reflective journal, surveys and interviews. We focus on the first design-principle, and show how learning was promoted by features designed according to this principle in each of the courses. We recommend using the design-principles developed in this research to foster meaningful learning in other Web-based courses in higher education.

Students in Higher Education in Germany: Gender Differences in their internet use, media literacy and attitudes towards eLearning

Rudolf Kammerl, University Passau / University Nuremberg, Germany; Simon Pannarale, University Passau, Germany

In 2006, all 9000 students at the University Passau (Germany) were invited to take part at an online questionnaire. A participation of over 6% were collected. About 84% of all the students polled have access to the Internet in their apartments or apartment-share communities. About 93% of male students rated their media literacy as high or fairly high, but only 77% of female students did so (r = +- .215). Most students (96%) feel themselves able to handle standard-applications, 42% of all students state that their competences related to production of own media is high (13%) or fairly high (29%). 65% of male students rate their competences in this section as high or fairly high but only 25% of female students do so. While 84% of students training for primary school education think that the success of eLearning is not guaranteed, only 56% of the whole sample, agree to that. Also the preferences with form of eLearning show low correlations with gender but higher with media literacy.

A Graphical User Interface of a Visual Simulator for Computer Literacy and Architecture Education

Keiichi Kaneko, Masaki Nakagawa, Tokyo University of Agriculture and Technology, Japan

A visual computer simulator has been designed and developed to help learners to understand computer literacy and architecture. It is used in real lectures and exercises of computer architecture. Our simulator is written in Java and works as an applet as well as a stand-alone application. Its graphical user interface (GUI) provides visual simulating function in the register-transfer level and assists beginners of computer science to comprehend how computer works. The GUI also invokes communicating function and supports asynchronous information sharing between learners and instructors. This paper describes details of its GUI and reports a statistical evaluation from its users (learners). From the result of application of our simulator into real computer education, it is confirmed that an educational effect of its GUI is statistically significant.

Validating an Emotional Presence Scale to Measure Online Learners' Engagement

Myunghee Kang, Suyeon Kim, Hyungshin Choi, Sunghee Park, Ewha Womans University, Korea (South)

Emotion is considered to be a crucial factor for students to engage in e-Learning. Research on emotional presence, however, is still in an early stage and no scale has yet been developed to measure emotional presence. Through a literature review on emotion and emotional presence, three theoretical constructs – feeling, expressing, and managing emotion - were identified.

The scale was previously validated and modified through the preliminary study with 418 college students. This paper reports the re-validation process of the scale by administering it to 305 students. The result confirms the three constructs with different groupings of the measurement items.

The Quality Manual (QM), Tool for Developing Quality in e-Learning

Kristiina Karjalainen, Lappeenranta University of Technology, Finland; Taina Rytkönen-Suontausta, University of Kuopio, Finland

Abstract: Quality Management in e-Learning project (VOPLA), a joint venture between three Finnish universities (University of Helsinki, University of Kuopio and Lappeenranta University of Technology), offers an open access to the Quality Manual (QM) for developing both quality in e-learning and learning and teaching processes generally. It aims to give a wider perspective on quality management in e-learning by identifying contents and methods for e-learning quality management. The QM facilitates the start-up of quality management systems in an organization, offers phases for planning e-learning and a checklist of quality aspects for teaching and digital materials, helps to describe the role of e-learning support services, gives a quality framework for planning and implementing e-learning in an organizational level, helps the organization to take a broader view on quality management and, finally, gives support in planning the allocation of resources and the development of skills.

Analysis of Anger in Mobile Phone Email Communications in Japan

Shogo Kato, Faculty of Human Sciences, Waseda University, Japan; Yuuki Kato, Tokyo University of Social Welfare, Japan; Douglass J Scott, Waseda University, Japan; Kanji Akahori, Tokyo Institute of Technology, Japan

This paper focuses on the emotion of anger experienced when using mobile phone email. By better understanding the causes of anger in email, it is hoped that strategies can be developed to avoid such emotional troubles. This paper describes a three-phase research project: The initial study investigated the causes of the occurrence of anger in email communication by mobile phone. Two follow-up studies were conducted to better understand the causes revealed in the initial study. One result was that late responses to mobile phone email causes anger significantly faster than tardy replies to computer email. In addition, results indicate that subjects experienced more sadness and anger and less joy when they read emails written using short sentences in comparison to emails containing emoticons suggesting that short sentences have a strong influence on emotions in textual communications.

E-Learning for Technological Literacy Education in a Pre-College Engineering Program

Yukari Kato, Tokyo University of Agriculture and Technology, Japan

This study assesses the benefits of a multimedia e-Learning environment in a pre-college language program in engineering education, based on the moodle platform. This prototype e-Learning system is designed to provide attractive course materials for technological literacy education for a wider audience, including first-year students, high school students, and foreign students in pre-college courses. In order to engage a wider range of students, engineering faculty paired up with Japanese language teachers to develop an e-Learning system, creating four modules that include video lectures, auto glossary for technical terms, reading materials with narration, and two types of comprehension activities. Evaluation results indicate that a multimedia e-Learning environment is effective and has the potential to better prepare students for engineering education, especially for advanced learners of Japanese in pre-engineering courses.

Local Talk About World Class Education: A Toolbox for Constructive Conversation"

Cathy Kaufman, Indiana University of Pennsylvania, USA; Josh Williams, St Marys High School, USA

In his book, King Arthur's Round Table: How Collaborative Conversations Create Smart Organizations, David Perkins points out how well-intended adult conversation too often becomes misdirected, unproductive and useless to both the individuals and the institutions they seek to improve. Although a round table may have facilitated more effective communication in a by-gone era, today's busy employees are more likely to benefit from an armory of useful information. In this article, we link the contemporary concern about 'world-class' preparation of students with a toolbox of electronic information as a common platform for diversified conversation across educational, corporate, healthcare and governmental workplaces.

Games and Simulations in Higher Education (Note: Bring laptop for hands on)

David Kaufman, Simon Fraser University, Canada; Louise Sauve, University of Quebec (Teleuniversite), Canada

Games and simulations have recently gained popularity as they provide new and engaging instructional methods to enhance students' learning. The enormous popularity of videogames for entertainment has fueled this trend and many educators are searching for ways to use the motivational power of games, simulation games, and simulations for educational purposes. This workshop will provide an overview of the field of games, simulation games, and simulations in higher education, and will present a number of illustrative examples. The workshop leaders will address the rationale and types of games and simulations used in higher education, both on campuses and at a distance. Participants will work in small groups to discuss games and simulations that could be used to enhance students' learning in their courses.

Learning with Games and Simulations: Examples, Evidence and Supporting Technologies, Part 1

David Kaufman, Simon Fraser University, Canada; Louise Sauvé, Télé-université / Centre d'expertise et de recherche sur l'apprentissage à vie (SAVIE), Canada; Ronald Owston, Institute for Research on Learning Technologies, York University, Canada; Carolyn Watters, Dalhousie University, Canada

Computer-based games and simulations are widely regarded in the literature as promising learning technologies. However, integrating these activities into educational programs and evaluating their impact present many challenges in design, technological support, implementation, and evaluation. This symposium presents five projects that address aspects of these issues and show the impact of games and simulations on health-related learning in clinical, classroom and professional

education settings. These include a multimedia Parcheesi game used to teach teenagers about sexually transmitted infections; a series of games for children managing chronic diseases including Inflammatory Bowel Syndrome; the COMPS environment for health professional education; a randomized field trial of games for student literacy skills; and the ENJEUX collaborative online play environment. All are part of the Canada-wide Simulation and Advanced Gaming Environments (SAGE) for Learning initiative.

Learning with Games and Simulations: Examples, Evidence and Supporting Technologies, Part 2

David Kaufman, Simon Fraser University, Canada; Louise Sauvé, Télé-université / Centre d'expertise et de recherche sur l'apprentissage à vie (SAVIE), Canada; Ronald Owston, Institute for Research on Learning Technologies, York University, Canada; Carolyn Watters, Dalhousie University, Canada

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Examining Authoring Tools for Serious Games

Marty Kauhanen, Minh Tran, Robert Biddle, HOT Lab - Carleton University, Canada

Abstract: Serious games are games that support learning. Studying serious games has led our research group to examine authoring tools for video games and interactive narrative systems. This paper introduces and highlights some of the user-centered methods and frameworks employed in our ongoing research to examine existing authoring tools and to help in the development of new ones. These techniques may be employed easily in other domains. Finally, we present a basis of a pattern language of design for authoring tools, specifically for story-tellers that are not programmers.

Usability Of The User Interface Design Of A Courseware Management System

Termit Kaur, Universiti Sains Malaysia, Malaysia

The purpose of this study was to evaluate the usability of a site called the e-Lesson Creator (eLC). E-Lesson Creator is a web-based course management system developed by a group of researchers from the School of Educational Studies, Universiti Sains Malaysia. The main objectives of the development of the eLC were to create customized lessons to suit the learning needs of learners In practice, the e-Lesson Creator is a platform from which teachers pick material from a multimedia library using a lesson template wizard. The evaluation focused on usability testing of its interface design. This involved examining the e-lesson Creator's User Interface Design. Although the evaluation suggested that the eLC was positively received, the findings showed that much can be done to improve it. Though this study focused specifically on the interface design, other weaknesses were also detected. It would be advantageous to have professional editing works to enhance the overall quality of e-lesson Creator.

Influence of Prompts on Memory on Paper or on a Computer Monitor

Yuka Kawasaki, Hyogo University of Teacher Education, Japan; Haruhisa Yamaguchi, Yumi Yamaguchi, Okayama University, Japan

In this paper, we examine the influence of underlining as a prompt to memory on paper and on a computer monitor. We conducted three experiments: 1) the prompt was provided on paper, 2) the participants added the prompt on paper, 3) the participants added prompt on a computer monitor. We found clear evidence that prompts are effective in enhancing learning on paper. An analysis of the data in this study indicated that prompts on a computer monitor could also be effective when we are used to using the functions of them on a computer. That is to say, e-Learning will become a very powerful learning tool when we use prompts on a computer.

Motivation and Integrated Web Site of Multi-media Materials for Japanese Reading Course in College

Yuka Kawasaki, Hyogo University of Teacher Education, Japan; Kyoko Selden, Cornell University, USA; Haruhisa Yamaguchi, Okayama University, Japan

In this paper, we introduce an integrated web site that we created for the Intermediate/Advanced Japanese reading course in Cornell University. The web site includes 1) text with dictionary and reading audio, 2) kanji stroke order movie and kanji dictionary, 3) kanji recognition workbook, 4) authentic examples of expressions, 5) kanji recognition game, and 6) other information such as author biographies. We analyze students' comments on this web site, and examine their motivation toward learning Japanese with on-line materials. According to their comments, the students used all function of this web site for both class assignments and expanding their interests in Japanese language, society, culture, history, and so forth. In this research, we found that students are highly motivated when they use on-line materials for their Japanese study.

The Collaborative Platform on Contents-Sharable for the Active Learning

Mizue Kayama, Shinshu University, Faculty of Engineering,, Department of Information Engineering, Japan; Toshio Okamoto, The University of Electro-Communications' Graduate School of Information Systems, Japan

The purpose of this study is to explore the architecture for collaborative learning environment, in which individual learning and collaborative learning are smoothly connected. We proposed the composition model of a collaborative workplace, and the management model to the action in collaborative learning space and the state of learning context. Based on the previous

proposals, in this paper we describe the mechanism for Contents-Sharable between a private workplace and a collaborative workplace.

Active Pedagogical Tools to Support Effective E-learning Environments

Jared Keengwe, University of North Dakota, USA; Patrick Wachira, Cleveland State University, USA; Grace Onchwari, Joseph Mandala, University of North Dakota, USA

The rapid advances in educational technology has allowed for the growth of collaborative e-learning experiences unconstrained by time and space. Even so, students do not learn from technology; they learn from competent instructors who have been trained to use effective interactive strategies to support e-learning outcomes. The purpose of this paper is to examine the role of constructivist teaching methodology to enhance e-learning environments.

Empowering Students to Learn Effectively With Technology Tools

Jared Keengwe, Assion Lawson-Body, Grace Onchwari, University of North Dakota, USA; Gladys Arome, Barry University, USA

One primary task for educators involves determining how best to utilize available technology resources to enhance student learning. A U.S. Department of Education (2000) report that: "Teachers must be comfortable with technology, able to apply it appropriately, and conversant with new technological tools, resources, and approaches. If all the pieces are put into place, teachers should find that they are empowered to advance their own professional skills through these tools as well. (p. 39). This paper explores the benefits of learning with technology tools when appropriately integrated into teaching and learning to maximize student learning.

Raising the Visibility of Asia in Teacher Preparation through E-Learning

Tim Keirn, California State University Long Beach, USA

The Freeman Foundation has funded a pilot program at California State University, Long Beach to raise the visibility of Asia in primary and secondary teacher preparation. This project has a large e-learning component. Through the project, teacher education faculty from ten California universities have collaborated to create web-based materials for enhancing pre-service understanding and meaningful pedagogic application of knowledge about Asia in language arts and social studies classrooms. Curriculum and lessons are developed for the university classroom, and the web-based design not only aids pre-service learning, but facilitates dissemination of the project and raises the visibility of Asia in teacher education beyond the institutions directly involved. This session will present the origins and web-component of the project, and share the successes and challenges of electronic collaboration.

Increasing Efficiency of Online Courses with Synchronic Software: Strategies and Interaction Analysis

Reza Khajavinia, University of Najafabad, Iran (Islamic Republic Of)

This study investigated a synchronous web-based course system (SWBCS) as a supplement to university courses taught via distance education. Specifically, the research investigated how and why instructors used the tools available within the synchronous system to enhance student learning. A mixed methods approach included student and instructor surveys, instructor and support personnel interviews and focus groups, classroom observations, analysis of event and problem logs, analysis of classroom recordings, and a researcher's journal. Analysis of the data collected provided insights regarding successful strategies for the integration of a SWBCS and documented the increased communications and interactions it provided. This research provides new insights into the use of synchronous learning environments in courses offered via distance.

Online Course Designs: Anything to Change?

Reza Khajavinia, University of Najafabad, Iran (Islamic Republic Of)

This study establishes a theoretical basis for an extension of a previous: typology of design elements of online courses to include elements specifically impacting students with disabilities. The prevalence of these special design elements is then examined from the results of a survey of existing online courses. It was found that these courses do generally include design elements necessary to meet the basic needs of students with disabilities, but that as more students with more sophisticated needs enroll in online courses, the design of these courses must further evolve. This study involved two components: identifying the design elements applicable to special needs populations and reporting the frequencies of those elements in contemporary practice. The Study includes design variables from course, lesson, and assessment levels and contains 156 elements and 600 data points. Next, the study addressed the frequency with which each selected element appears in online courses.

Building Meaningful Blended E Learning Community

Badrul Khan, Laura Granato, Mays Nakashima, Eric Jacobs, Federal Leadership Institute, USA

Blended e learning has increasingly become a viable, effective way of delivering instruction and training. The Federal Leadership Institute (FLI) provides blended-learning solutions to federal agencies. FLI's Framework for Blended E Learning puts the instructional systems design and pedagogical issues in the context of a much wider and complex set of factors integrating the analysis of an organization's e-learning environment. The Framework serves as a guide to plan, develop, deliver, manage, and evaluate blended learning programs. By using the Framework, we help organizations develop strategies for effective learning delivery and a high return on investment. In this presentation, we will share our blended-learning experiences with the US Department of Housing and Urban Development (HUD).

How Is Your E Learning? A Comprehensive Program Evaluation Is The Key.

Badrul Khan, Laura Granato, Federal Leadership Institute, USA

E Learning is no longer a "new" initiative for many organizations having already invested heavily in the development and deployment of online programs. Many believe now is the time to find out how an e learning program is really working and

to make decisions about improvement and capacity building. Because e-learning is fairly new to the corporate environment, literature on e-learning program evaluation is naturally skimpy. Frydenberg (2002) noted that few fully developed programs have arrived at a stage where summative evaluation is possible.

Toward a Hybrid Recommender System for E-Learning Personalization Based on Web Usage Mining Techniques and Information Retrieval

Mohamed Koutheaïr Khribi, Mohamed Jemni, Research Unit of Technologies of Information and Communication, Tunisia; Olfa Nasraoui, Speed School of Engineering and Computer Science, USA

The last decade has witnessed a great interest in e-learning and Web based education areas. Unfortunately, most of the e-learning environments used in the educational field today are still delivering the same educational resources and services in the same way to different learners. Hence, observing the increasing need for personalization in e-learning systems, we aim to make these systems deliver the most appropriate content to learners according to their interests and needs. This paper outlines the use of on-line automatic recommendations in e-learning systems based on learners' access history. First we start by mining learner profiles using usage Web mining techniques and content-based profiles using information retrieval techniques. Then, we use these profiles to compute relevant links to recommend for an active learner by applying a number of recommendation strategies.

Effectiveness of the World Wide Web as a Research Tool for Self-Directed Learning of Ozone

Hanna Kim, DePaul University, USA

The use of computers and the Internet by students has increased rapidly in recent years. Teachers ask what types of learning experiences can be facilitated by using the Internet in their classroom. This study investigates the use of the World Wide Web (WWW) as a research tool in promoting self-directed learning in a group of 7th grade students. Performance and attitude questionnaires are used to determine the effectiveness of the WWW in assisting the students with the construction of knowledge on ozone and ascertain positive/negative effects on their learning, including motivation for independent learning.

How can pre-service teachers majoring in computer education acquire instructional design expertise?

Hyewon Kim, Florida State University, USA; Kyujeong Han, Gongju National University of Education, Korea (South)

Model-centered instruction which presents expert mental model before or during learning can facilitate and help novice learners' problem solving process. During six phases of cognitive apprenticeship model which is a method for applying model centered instruction theory, collaborative learning strategy can maximize articulation and reflection of novice learners. This presentation will present results of a study that investigated the effects of model-centered instruction and collaborative learning on the learning of instructional design process for pre-service teachers who are majoring in computer education for elementary school students.

Effects of Role Assignment on Team Efficiency, Interaction, and shared Mental Model in Web-Based Team Learning

Soohyun Kim, Minjeong Kim, Dongsik Kim, Hanyang University, Korea (South)

This study investigated the effects of role assignment facilitation on team efficiency, interaction, and SMM in an asynchronous web-based discussion. Eighty students were randomly assigned to two conditions (the role assignment condition/ the control condition). The results indicated that the learners who were in role assignment group sowed better team efficiency (role team efficiency and inter-personal relations team efficiency), interaction and SMM was statistically significant. In addition, there were strong correlations among team efficiency, interaction, and SMM. The findings of this study suggest role assignment design strategies in web-based team learning highlights how important individual responsibility and reliability and can be an essential factor to perform team tasks. Due to the lack of in-depth data collecting and analysis, the results and interpretation are tentative. Further studies to verify the results are recommended.

The Extent of Learner and Instructor Discourse Varies with Respect to Students' Academic Levels

Peter Kiriakidis, Panayot Gueorguiev, Swiss Management Center, Canada

This paper discusses the importance of the direct relationship between instructor discourse and learner discourse with respect to students' academic levels in the online learning environment during online discussions. It provides meaningful insights toward pedagogical theory and corresponding instructional practices associated with these two factors: (a) the extent of instructor discourse and (b) the extent of learner discourse within the online learning environment and with respect to students' academic levels (i.e., masters and doctorate).

Teaching Technology in a Web-Enhanced Course

Dianne Koehnecke, Webster University, USA

Abstract: This article describes the teaching of a web-enhanced class in young adult literature to graduate students at a Midwestern university during the Spring II, 2007 session. Background information about the course is described and problems in setting up the course as a web-enhanced class are reviewed. A description of how web-ct is used in the class and students reactions to this format is also explained. Results of an informal survey regarding students who took the course are given and implications for future courses using online programs are included. 86 words

Device-independent Learning Contents Management in Ubiquitous Learning Environment

Tomoko Kojiri, Yuichiro Tanaka, Toyohide Watanabe, Nagoya University, Japan

This paper addresses an adaptive ubiquitous learning environment in which learning contents are selectively provided according to the types of devices that students use. Functionalities of devices are different because of their components. According to file types or display sizes of learning contents, some of them are not appropriate for the devices whose physical functionalities are restricted. Moreover, students select devices that satisfy their learning situations and objectives, so different devices are not always used under the same learning environment. In order to provide learning contents for each

device, learning situation that each device is used should be analyzed. In this paper, PC, PDA, and mobile phone are focused, and two kinds of their characteristics are discussed: physical and logical characteristics. In addition, the prototype system which determines learning contents statically from high school mathematical database based on these characteristics is introduced.

Best Practice in e-Learning: Igniting Faculty Innovation with Laptops and Aloha

April Komenaka-Scazzola, Arts and Sciences, Univ. of Hawaii at Hilo, USA; Robert Chi, Cynthia Yamaguchi, Office of Technology & Distance Learning, Univ. of Hawaii at Hilo, USA

At a cost of under $1600 per faculty participant, the University of Hawai`i at Hilo is seeing a flowering of faculty creativity and enthusiasm for web-based teaching. In 2006-2007, the institution gave a new Macbook and iPod to 18 faculty proposing to develop and deliver online and/or blended courses over two semesters, and built these participants into a community with workshops, interviews, one-on-one technological training and support, a newsletter, a listserve, and luncheons where faculty shared their innovations. In the first two semesters, the investment has produced an average of 2.24 online or web-enhanced courses per participant, growing to an average of 2.82 new and existing courses in 2007-08, or an average of 5.06 courses per participant over two years. On the basis of the demonstrated success of the first cohort, we are funding a second cohort and continuing the community-building activities.

Modeling and multiple representation systems in the design of a computer environment for the learning of programming and C by beginners

Maria Kordaki, Department of Computer Engineering and Informatics, Patras University, Greece, Greece

This study considers a modeling methodology for the design of a computer based problem-solving environment (named L.E.C.G.O: Learning Environment for programming and C using Geometrical Objects) for the learning of computer programming and the programming language C by beginners. For this design, constructivist and social learning theories were taken into account. The general design has taken into consideration models of the learning process and subject matter as well as potential learner behavior in dealing with fundamental tasks. The main emphasis was placed on the role of: a) multiple external representations in student learning, b) motivation through performing problem-solving activities taken from the familiar and meaningful context of drawing and using simple geometrical objects, c) the active participation of students in their learning by using hands-on experience and d) visual feedback on the actions taken by students for their self-correction.

Providing tools for the development of cognitive skills in the context of Learning Design-based e-learning environments

Maria Kordaki, Department of Computer Engineering and Informatics, Patras University, Greece, Greece; Spyros Papadakis, Thanasis Hadzilacos, Hellenic Open University, Greece

This paper focuses on the design of learning tools that appropriately support 'Learning Design' (Koper and Tattersall, 2005). Specifically, these tools can be used in lesson planning to encourage the development of critical thinking in learners. In particular, a Cognitive Skill-based Question Wizard (CSQ-Wizard) is proposed as a supporting tool for teachers in their attempts to design appropriate lesson plans that can encourage the development of cognitive skills in learners. The design of this CSQ-Wizard is based on modern social and constructivist views of learning. The idea, the rationale, the architecture and the interface associated with the proposed CSQ-Wizard is presented through a specific example of possible implementation within LAMS; a web-based open source environment that supports Learning Design.

A Case of Technological Need--The House of Tiny Treasures

Joe Kortz, Janice Nath, Beth Pelz, Kathrine Jenkins, University of Houston Downtown, USA

This descriptive case study investigates the partnership of an urban university and the House of Tiny Treasures (an early childhood development center for young children of the homeless). Through donations technology was implemented and professional development ensued for improved teaching and learning applications for underprivileged pre-school students. The technology plan of this project will be described in terms of providing robust wireless connectivity, hardware with multimedia capabilities, and training needed for pedagogical applications for young children in an environment where there once was none.

Effective use of Public Folders in Academic setting: An experience

Saroj Koul, Acadia University, Canada

At many Business Schools, a number of courses are taught in a large-section lecture format. Absence of a tailored learning environment disengages students and creates a significant challenge for the Instructor. As an alternative course management tool, Microsoft Office tools hold great potential in assisting them to increase the interaction of Instructor-to-Student, Student-to-Instructor and Student-to-Student. This paper looks at the benefits offered by the Microsoft Exchange/Outlook architecture and illustrates the effective use of Public Folders in a lecture format setting that can be extended to any discipline irrespective of its class size. This approach has been tried for over 17,550 student contact hours. The author believes that such a collaborative and partly automated approach can significantly improve the student engagement.

Simulation Study: The Standardization of the Patient Handover Process from Ambulance Personnel to Receiving Hospital Staff can Improve the Communication Efficacy

Valentyna Koval, Center of Excellence for Surgical Education and Innovation, Canada; J. Stuart Donn, British Columbia Ambulance Service, Canada; Karim A. Qayumi, Centre of Excellence for Surgical Education and Innovation. University of British Columbia, Canada

Effective Communication in Medical Care is essential for the delivery of high quality, safe patient care. At the same time Medical Care is extremely complex and this complexity coupled with some human performance limitations makes

Communication even more difficult. One of the examples is patient handover from ambulance personnel to receiving hospital staff where stressful conditions; lack of clarity in written communication; assumptions made in oral communication transitions in staff; time pressures compromise the communication between health providers and lead to breakdowns. In this study we hypothesize that standardization of the patient's handover between ambulance and receiving hospital will make the communication more effective. The study will determine the communication efficacy during the patient's handover between ambulance personnel and receiving hospital staff by assessing the ability to reach specific communication outcomes while performing real case-scenarios with Human Patient Simulator.

Designing Inquiry e-Learning Environments for Graduate Research

Olga Kritskaya, Towson University, USA

A significant part of professional activity in education is the diagnosis of educational problems. It is important that we provide tools to enhance teacher diagnostic and inquiry skills. To address this task, our research team developed an activity-based, user-adaptable multimedia instructional system -- a data-base of instructional scenarios, each designed to both introduce a theoretical concept, and to illustrate a variety of methodological approaches in which the concept can be applied within the context of educational research. This paper shares the conceptual framework and the challenges of developing such an instructional system whose aim is to guide system-learner interaction, while assisting educational professionals in developing their inquiry and diagnostic skills.

A Uniform Approach to Support Version Control in Learning Content Management System

Sandra Krüger, Lehrstuhl für Software-Technik, Germany

In Learning Content Management (LCM) systems the data of most interest is the learning objects. However, today's LCM systems do not yet address the problem of content versioning in a unified way. Many small- and medium-sized LCM systems do not even support different versions of content. This paper points out that the requirements of version management in LCM systems differ from those in other areas, where some research work has been done in the field of version control, e.g. in Software Configuration Management. An object-oriented version control system is presented. This accomplishes the requirements of LCM systems and addresses the version management of object-oriented LCM systems in a uniform way. The version control system described in this paper is characterized by five versioning properties: application specific, fine-grained, structure-oriented, evolution-resistant and orthogonal concerning the data model.

Action driven and strategic game-based training

Harro Kucharzewski, MarineSoft GmbH, Germany; Carsten Hellmich, Zentrum für Graphische Datenverarbeitung e. V., Germany

Lessons learned from producing an action driven and a strategic game-based fire fighting training are presented. Insight into practical considerations using open-source game engines and implications for the authoring and implementation phases are given. Both scenarios are used as e-learning courseware for the IMO advanced fire-fighting training course.

Training and Post Training Solutions for Operators and Maintainers

Harro Kucharzewski, MarineSoft GmbH, Germany; Jens Rozmyslowski, ThyssenKrupp Marine Systems, Germany

This paper deals with training and post training solutions for operators and maintainers using an integrated system approach. It combines different stages of training and job support by means of virtual presentation and training based on an interface (HLA) to real time simulation training systems. Thyssen Krupp Marine Systems (TKMS) is conducting a Research and Development (R&D) Study "Realistic Training in Virtual Reality (3D) under the use of CAD Data". The aim of the study is the further development of SIM/SBT (Simulation and Simulation Based Training) to realize realistic training in Virtual Reality. This new form of SIM/SBT is called Virtual Ship Training and Information System (VISTIS®). VISTIS® is based on an interactive Virtual Reality visualisation. It demonstrates the conversion of computer aided design data source of a selected engine room compartment into virtual reality and the connection to a simulation based training application of the propulsion system interface.

Searching for an alternative instructional strategy for remedial EFL online learning: based on Cognitive Load Theory

Masayuki Kudo, Hokkaido Institute of Techology, Japan

From the previous studies, EFL (English as a Foreign Language) learning in Japan is known for low motivation, and low achievement. This paper discusses a possibility of a new instructional strategy of EFL remedial education applied the concept of Cognitive Load Theory by reviewing literature. This paper also reports a test conducted to confirm the CLT-based learning modules, SCSD (Single Task Sub-skill Drills), suit for the needs of lower achievers in Japanese EFL education. The results from both test and literature review support the design of the SCSD. It is appropriate for EFL remedial classes keeping the right amount of cognitive load in learning and nurturing confidence in which often learners oppressed. In addition, the drilling of cognitive action on WBI learning is beneficial for development of motivation and self-efficacy, instead of conventional EFL approaches.

Software Tutors Help Female Students Learn Programming Concepts Just as Well as Male Students

Amruth Kumar, Ramapo College of New Jersey, USA

Several studies suggest a significant difference between women and men in their attitude towards programming as well as their attitude towards interacting with computers. So, it is reasonable to question whether women learn computer programming concepts as well as men do using software tutors. In order to answer this question, we analyzed data from the evaluation of three programming tutors used in Computer Science I. We found that 1) software tutors do help female students learn; 2) there is no statistically significant difference between the learning of female and male students using our

software tutors. These results will be of interest to developers of software tutors, educators who use them, and Computer Science education research community.

Establishing an Education and E-Learning Support Center: From Theory to Practice

Dina Kurzweil, Beth Marcellas, Uniformed Services University of the Health Sciences, USA

This paper is designed to look at adoption of innovation from the perspective of early adopters themselves – people who have adopted educational technology independently but want to find a way to ensure that their institutions will support e-Learning and other educational technology innovations in a sustainable fashion. Building on a foundation of theory about organizational change and innovation in the higher education arena, the paper then goes on to explain the specific ways in which these theories were put into practice in order to establish an education and E-learning support center for a medical school. The paper will lay out the steps that led to the creation of the education and e-learning support center: identifying the need, building the support of the stakeholders, developing the approach to be used at this institution, and creating a strategic plan for the office.

What We Need for Effective Learning in Ubiquitous Environment:Lessons from Korean Cases

Sungho Kwon, Kyunghee Kang, Sunhee Bhang, Hanyang University, Korea (South)

This study is to analyze the implications of effective learning in a ubiquitous environment. Research proceeded according to the multiple case study analysis method. This paper is one result of the Korean case study to examine the effectiveness of, and satisfaction with, u-learning. We will introduce necessary conditions for effective learning in a ubiquitous environment. Each condition was elicited through the case study, and the that analyzing framework was classified into hardware related to infra structure, software such as learning contents, teaching-learning activity and support, class management, human-ware related to learner and teacher, system-ware as an education system, and administrative supporting.

The Effects of Worked Examples in Web Based Instruction: Focus on the Presentation Format of Worked Examples

SunA Kyun, Sookmyung Women's University, Korea (South); Hyunjeong Lee, the University of Seoul, Korea (South)

The goal of this study was to investigate the effect of presentation formats of worked example and the interaction effects between presentation format of worked examples and prior knowledge of learners. An investigation with 112 middle school students of working in four conditions (CPWE, CWE, PWE, and control group) was conducted and. The results indicate that CPWE was most effective in retention and transfer. In addition, there was a partial expertise reversal effect in the element transfer test: Prior-knowledge learners were superior with both CPWE and PWE to with CWE and the control group, while low prior-knowledge learners were superior with CPWE to with other conditions.

Bru-N-O'Mat - Automatically Generating and Marking Net Requirements Calculation Exercises

Richard Lackes, Markus Siepermann, University of Dortmund, Germany

This paper presents the concept and realisation of an e-learning tool that provides predefined or automatically generated exercises concerning the primary requirements planning. Students may practise where and whenever they like to via WWW. Their solutions are marked automatically by the tool while considering consecutive faults and without any intervention of lecturers.

Networked learning communities' online activity, pre-service education and professional development

Therese Laferriere, Laval University, Canada; Mélanie Tremblay, University of Quebec in Montreal (UQAM), Canada; Stéphane Allaire, University of Quebec in Chicoutimi, Canada; Christine Hamel, Laval University, Canada

The activity of a virtual community of support and communication for pre-service teachers (TACT), which was connected to a school-based community of practice (teaching in a networked classroom), is studied. The integration of information and communication technologies (ICTs) into teaching and learning was participants' focus of collaborative inquiry and knowledge building. A design experiment methodology was applied, and ethnographic methods used. Results are presented in three forms: 1) themes and patterns that demonstrate participants' integration of ICTs to their own learning and teaching, 2) collectively grown online activities, and 3) an illustrative (best) case of a participant's acquisition of expertise over the ten-year period. Three key processes in the design (or cultivation) of a networked community for teacher education and professional development are identified in the discussion of the results: participatory design rooted in a university-school partnership, reflective practice and production of artifacts, and onsite/online legitimate peripheral participation.

Teaching as a visible activity in remote networked schools: A socio-cultural perspective

Therese Laferriere, Laval University, Canada; Alain Breuleux, Mc Gill University, Canada; Stéphane Allaire, University of Quebec in Chicoutimi, Canada

This paper addresses socio-cultural possibilities and obligations related to teaching as visible when teachers engage K-12 learners in the use of collaborative technologies over large bandwidth in small remote rural schools. A systemic initiative was conducted with the aim of enhancing the learning environment in such schools and keeping them from closing for pedagogical reasons. Engeström's activity theory framework provided the analytical framework. Leading teachers were teachers willing to open up their classrooms, using webcams and electronic forums, to a network of professional collaborators. We present the ways in which they did, and our understanding of the new possibilities and obligations that emerged.

P.A.C.T. – Coaching the Parent in Home Tutoring Best Practice

Orla Lahart, National College of Ireland, Ireland; Declan Kelly, CRITE, Trinity College Dublin, Ireland; Brendan Tangney, University of Dublin, Trinity College, Ireland, Ireland

Research informs us that there is a high correlation between parental involvement in learning activities in the home and the child's academic success. However, despite this there has been little focus on providing personalised support for parents in

their role as home tutors. In this paper, we present P.A.C.T, a personalised coaching system for parents. More specifically, P.A.C.T. coaches parents in developing the necessary skills for home tutoring. The coaching process within P.A.C.T. comprises three stages. Within theses stages parents are supported at two levels. Parents are provided with "just-in-time" domain dependent support through the provision of domain dependent activities. P.A.C.T. also coaches the parent in domain independent tutoring skills. This paper illustrates how P.A.C.T.'s architecture and implementation support the parent during the tutoring process and provides a mechanism by which parents can develop their tutoring skills.

Evaluation of the Effectiveness of Podcasting in Teaching and Learning

Sawsen Lakhal, College of Business Administration, Université Laval, Canada; Hager Khechine, Daniel Pascot, Department of Management Information Systems, College of Business Administration, Université Laval, Canada

This paper describes the process and the results of a study intended to evaluate the effectiveness of podcasting technology for teaching and learning. A sample group of 192 students enrolled in an online course, with access to audio playbacks (podcasts) of the same course given in a classroom environment, completed an online questionnaire. An ANOVA was done to compare the group of students who listened to the online recordings with those who did not. The results of the study indicate that the students who listened to podcasts demonstrated deeper learning and greater satisfaction than those who did not.

The Use of Agent Interfaces in Information Systems Certification and Accreditation Training

Thresa Lang, Special Aerospace Security Services Inc, USA

Abstract: The current and expanding demand for trained Information Assurance personnel to perform certification and accreditation (C&A) processes on information systems in order to ensure that systems are compliant with applicable government regulations and standards has resulted in a critical requirement for C&A process training that is high-quality, effective, and low-cost. This study explores the use of anthropomorphic interactive agent interfaces as a tool to help meet these training requirements. Specifically, this study examined the correlations between variables including: learning styles, acceptance of the agent interface, technical background and achievement of the course goals. The study showed a significant difference in the achievement of course goals between groups of students who had an agent interface integrated into the training and those who did not.

Virtual Mentoring For New Employees of State and Local Government

G. Richard Larkin, University of West Georgia, USA; Michale Lane, WilsonMiller, USA; John Dickey, Virginia Tech, USA

This showcase provides a preview of a virtual mentoring or e-mentoring program being designed to assist entry level employees in state and local government agencies. The literature on mentoring provides evidence of its value and some of the advantages of virtual mentoring over traditional face-to-face mentoring. The showcase outlines the six step process being used to design and implement the virtual mentoring program. The steps include (1) establish a network of potential mentors and protégés, (2) identify specific skills with which the protégés need assistance, (3) identify resources to use in assisting protégés, (4) match mentors to protégés, and (5) establish the online mentoring community and begin the process Also, the showcase provides information about the four step process that will be used to monitor and evaluate the project throughout its implementation.

PLE and e-portfolio as learning tools in the educational system

Lasse Juel Larsen, Lars Bo Løfgreen, Knowledgelab, SDU, Denmark

Over the last decade virtual learning environments (VLE) have gained wide acceptance as a mean of informational distribution and organization throughout the Danish higher educational system. While these environments have succeeded in creating a supplement to traditional teaching and knowledge sharing, they have, however, proven themselves highly unsuccessful in providing the right learning environment for both younger students and learners outside of the educational system. In light of the globalisation and the ever increasing demand for livelong learners, the current approach to virtual learning environments is in need of revision. On grounds of our current research into this field it is the aim of this paper to examine the possibilities of combining next generation learning environments – the so-called pervasive learning environment (PLE) – with e-portfolios as a viable solution to the current demand for facilitation of lifelong learning.

Blending community and authentic assessment in a hybrid course

Maggie Lattuca, Jean-Claude Provost, Adam Finkelstein, McGill University, Canada

This session will present the design and implementation process of a hybrid course at the post-secondary level developed as part of a larger pilot project to launch a series of fully online or hybrid courses in the Centre for Continuing Education. Firstly, we will demonstrate the multimedia-based learning resources designed to support interactive learning and consider the tools used in the construction of the learning materials. Secondly, the value and practicality of the learning strategies used will be discussed and we will address the value and appropriateness of blended learning as an instructional method. The importance of community building and authentic assessment have long been established as essential elements of successful online instruction and were key components in the design of this course on employment strategies. The course has been offered in two subsequent terms and is currently under revision for its next offering in fall 2007 based on a formative evaluation.

Enhancing the roles of the learners and the tutors by using a Problem-based Learning Software

Tang-Ho Lê, Remy Mazerolle, Université de Moncton, Canada

In the context of Technology Enhanced Learning, "learning for anyone, at any time, at any place" must be the slogan. However, we don't expect a reduced role of the learner and the teacher in the learning process. Contrarily, these roles should be easily carried out. Moreover, both the pedagogical cooperative and collaborative learning approaches should be

applied, too. This paper presents a Web-based software allowing to realize these expectations by applying the essential feature of the problem-based learning approach in the academic institutions.

Production and Distribution of Contents in Digital Video of Quality for the Distance Learning

Paulo Leão, Joel Casteleira, Instituto Ploitécnico de Portalegre Escola Superior de Tecnologia e Gestão, Portugal

This article describes methodologies for capture, processing, encoding and distribution of digital video of quality with demonstration contents for the distance learning. This work was resulted of the analysis and illations in the context of the creation of video with demonstration contents used to support teaching and learning activities related to Computer Science disciplines topics. The videos were used for streaming transmission in a platform implemented at "Escola Superior de Tecnologia e Gestão – Instituto Politécnico de Portalegre".

Assessing Purposeful Online Teaching and Design Quality: A Symposium on Efficacy Assessment

John LeBaron, Robert Crow, Dixie McGinty, Western Carolina University, USA; Ieda Santos, University of Warwick, UK

This essay introduces a series of papers that support an AACE E-Learn 2007 Symposium. Diverse strategies are presented through which online course designers and teachers may secure an accurate sense of whether their methods are achieving desired goals, substantive and procedural. Relating to the overall theme of the symposium, individual components focus on the following topics: clarity of purpose in online course design and teaching methodology, specific techniques for formative and summative assessment, third-party collaboration for objective data analysis and ethics in online course quality assessment and published research stemming therefrom. This first paper offers an introductory discussion of the issues addressed in greater detail by the three remaining works in this symposium series.

Efficacy Assessment for eTeaching: How Do We Determine Success?, Part 1

John LeBaron, Dixie McGinty, Western Carolina University, USA; Ieda Santos, Warwick University, UK; Robert Crow, Western Carolina University, USA

This symposium will feature four full papers addressing various facets through which online course designers and teachers may secure an accurate sense of whether their methods are achieving desired goals: substantive and procedural. Each paper will be represented by a presentation of approximately twenty minutes, interspersed with audience discussion and small group deliberation. Relating to the overall theme of the symposium, individual components will focus on the following topics: clarity of purpose in design and teaching methodology, specific techniques for formative and summative assessment, third-party collaboration for objective information gathering and filtering, and ethics in online course quality assessment. Although individual papers will be developed in concert with one another, each one will serve as a viable stand-alone work.

Efficacy Assessment for eTeaching: How Do We Determine Success?, Part 2

John LeBaron, Dixie McGinty, Western Carolina University, USA; Ieda Santos, Warwick University, UK; Robert Crow, Western Carolina University, USA

This symposium features four papers addressing various facets through which online course designers and teachers may secure an accurate sense of whether their methods are achieving desired goals: substantive and procedural. Each paper is represented by a presentation of approximately twenty minutes, interspersed with audience discussion and small group deliberation. Relating to the overall theme of the symposium, individual components focus on the following topics: clarity of purpose in design and teaching methodology, techniques for assessment, third-party collaboration for information gathering, and ethics in online course assessment. Individual papers have been developed cooperatively, but each one serves as a viable stand-alone work.

Identifying the perception on importance level of E-learning professionals' competencies in Korea

Bo Min Lee, Young Ju Joo, So Na Kim, Ewha Womans University, Korea (South)

The purpose of this work-in-progress research is to analyze the perception on importance level of competencies needed by e-learning professionals in Korea. We are going to ascertain core competencies in terms of the job roles and also to identify general competencies at the request of the whole e-learning field. First, by reviewing existing e-learning research, we'll identify an e-learning competency framework extracted from the previous e-learning competency research. Second, we make a plan for development and verification of survey questionnaire. Finally, we'll analyze the result by using a correspondence analysis method.

An Integrated Mathematics E-Learning Activity

Brenda Lee, WuFeng Institute of Technology, USA

An instructional activity based on individualized designs formed from student names has been taught in the traditional classroom for several years. However, there exist several instructional limitations. Last year, we started teaching an e-learning class with this activity. Not only does it overcome the traditional teaching limitations, it provides benefits for both the teaching and learning of integrated mathematics concepts. A feature of this e-learning integrated mathematics content is to provide a wide range of challenging activities and interactions which allows the students to be involved in learning mathematics with challenge. In this paper, we discuss our e-learning experience. We also share some of the students outcomes from this integrated mathematics contents based on our e-learning activity.

When graphic and web design meet course design: Applying graphic and website design principles into online course design.

Cheng-Yuan Lee, The University of Findlay, USA

This presentation introduces how to utilize graphic and web design principles into online course design. Based upon imperial results from internet marketing research and graphic design principles, the author explains how an online course could be improved in terms of web interface and usability by adopting efficient design principles.

Globalizing Distance Education in Higher Education

Seung-hee Lee, Rich Magjuka, Xiaojing Liu, Indiana University, USA

This study investigates the global practices of distance education in South Korea. It compares different international distance education programs from viewpoints of administration, course design, and delivery issues. It illustrates concerns, and challenges in globalization of distance education.

Culture Exchange Telecollaboration in Foreign Language Education: Where do we go from here?.

Shih-Ting Lee, Hyeseung Maria Chang, University of Texas at Austin, USA

Despite the fact that there are no lack of recommended techniques for teaching culture through the telecollaboration approach, we only know very few of the practice of teaching culture (Moore, 1996) or have controversial opinions on how it should be done (Liaw, 2006). Based on existing literature, this paper first discussed existing practices of culture exchange telecollaboration projects in foreign language classrooms. Built on findings from the literature, this paper will offer suggestions for designing more efficient culture exchange telecollaboration experiences that enhance learners' culture sensitivity and culture awareness.

The Diffusion of a Technology Innovation in Higher Education

Jing Lei, Syracuse University, USA; Blaine Morrow, Palomar College, USA; Maria Ciliberto, Syracuse University, USA

Based on survey and interview data collected from 21 college faculty members who participated in a state-wide teacher technology integration project, this paper investigates the effectiveness of providing incentives on teachers' adoption of technology innovations into pedagogical practices and the diffusion of technology innovation in higher education settings, and the factors affecting this process. Results show that teachers' technology adoption process can be facilitated by providing a certain incentives. However, for successful technology adoption to happen, all issues must be addressed: environmental barriers, knowledge and skills, and incentives. In addition to providing incentives, a number of other factors must also be addressed, including strong peer connections, ongoing support from peers and experts, and strong leadership. Findings from this study have significant implications for policy making and practice.

Integrating Technology into Teacher Education Courses: One Educator's Learning Journey from Technophobe to Techy

Nancy Lemberger, Long Island University, USA

This study traces a personal learning journey from technophobe to "techy" that extends into my graduate teacher education courses. I have integrated various technology tools and projects into courses on Teaching English to Speakers of Other Languages and Bilingual Education in a New York City university. Through an on-line survey of 74 students and follow-up interviews, I explore the impact of these integrations on students' technology skills and use in schools. Results reveal changes in some students' comfort and skill levels. In-school support for and access to technology is still lacking. Implications point to broader purposeful use of technology in teacher education programs.

E-Graphing: Perfection, Paradox or Persuasion

Jonathan Leonard, University of Vermont, USA

Graphs bring life to data. With the advent of the personal computer, constructing a graph has become only a few clicks away using programs such as Excel© or Lotus 1-2-3©. However, we have found that, today, graphs are often inappropriate, confusing or misleading. This article explains appropriate graph types for certain data sets, and how constructing a graph requires aesthetic as well as analytical thinking. In addition common ways of using graphs to mislead are discussed, using a classic example.

Interfaces Modelization in Computerized Adaptive Testing (CAT) for Learning Optimization

Martin Lesage, Gilles Raîche, Martin Riopel, Komi Sodoke, Université du Québec à Montréal, Canada

Rapid Internet expansion over the past years caused the development of the online learning human-computer interfaces (HCI) and collaborative work fields. Many E-learning systems were designed with a rigid structure. The online learning system Web servers and human-computer interfaces are only dedicated to a predetermined course of sequence of learning objects. An academic E-learning system could not adapt itself to teach professional formation or technical skill. The same affirmation holds for a corporate formation online learning system that could not be used for military online training. The actual solution to these actual problems is to allow different web servers for supporting either online or E-learning courses dispensing formation in academic, professional or military training domains. The authors of this papers are proposing a solution to these problems by the presentation of partial results consisting of a Flash application for question data entry and retrieving in IMS-QTI format.

New Distributed Research Practices and Scientific Immersion of Graduate Students with the Support of Technologies: The Case of Mentor

Lysanne Lessard, France Henri, Centre de recherche LICEF, TÉLUQ/UQAM, Canada; Nicola Hagemeister, École de Technologie Supérieure, Canada; Amaury Daele, University of Fribourg, Switzerland

MENTOR is a multidisciplinary research training program for graduate students in research field of mobility and posture disorders. Its members are distributed in a number of institutions across Montreal, creating challenges for the processes of collaborative research, joint supervision and scientific immersion. The purpose of our research project is to propose new distributed research and supervision practices supported by ICTs. In order to do this, we are designing a model of technological appropriation, taking into account the ongoing adaptation of the technologies and the evolution of the researchers' and students' practices. Collaborative working sessions are being observed in order to identify the pattern of the scientific community's activity. This will lead to the identification of actions and operations which should be supported by technologies and contribute to the development of scenarios which propose new practices of distributed collaborative research activity.

Converting a course from face-to-fact to On-line: Facing the Challenges

Sondra Lettrich, Mary Spataro, Seton Hill University, USA

As more and more students are seeking to complete graduate degrees on-line, colleges and instructors are faced with the dilemma of providing the same high quality of courses on-line that are presented in a face-to-face format. Converting a course from face-to-face to an on-line format while maintaining the same quality presents many interesting challenges to the instructor, especially when the instructor's teaching strength has always been in face-to-face contact with students. How does instructor relate to the on-line students? Converting instructional information into a format that will be interesting, motivating, and instructional while not being flat requires a great deal of planning and creativity. Where does the instructor begin? What training is necessary? There are many obstacles which need to be addressed before the course can be ready to be uploaded. The steps that need to be followed will be reviewed in this presentation as well as roadblocks to be overcome. Examples of prepared instructional materials will be presented.

The Anatomy of an On-line Master of Arts Degree in Inclusive Education: How it is Done

Sondra Lettrich, Mary Spataro, Seton Hill University, USA

As more and more students are seeking to complete graduate degrees on-line, colleges and instructors are faced with the dilemma of providing the same high quality of courses on-line that are presented in a face-to-face format. Converting a course from face-to-face to an on-line format while maintaining the same quality presents many interesting challenges to the instructor, especially when the instructor's teaching strength has always been in face-to-face contact with students. How does instructor relate to the on-line students? Converting instructional information into a format that will be interesting, motivating, and instructional while not being flat requires a great deal of planning and creativity. Where does the instructor begin? What training is necessary? There are many obstacles which need to be addressed before the course can be ready to be uploaded. The steps that need to be followed will be reviewed in this presentation as well as roadblocks to be overcome. Examples of prepared instructional materials will be presented.

The Electronic Health Library of British Columbia (eHLbc)

Nancy Levesque, Thompson Rivers University Library, Canada

British Columbia academic and health sector librarians responded to a need from students and healthcare practitioners to have expanded and more consistent access to health research databases. Geographic and jurisdictional boundaries contributed to disparities and inequities in providing health research information resources throughout the province of British Columbia. Under the auspices of the new B.C. Academic Health Council, a team of librarians worked with key stakeholders in post-secondary and health libraries, and with three provincial Ministries to establish a new consortium, the e-Health Library of B.C. A core suite of databases now supports the e-learning of students and health professionals. A collaborative approach enabled libraries to expand access to databases, reduce duplication and overlap of licences, maximize resources, and coordinate training and technical support.

Digital Storytelling: Bridging Traditional and Digital Literacies

Ledong Li, Oakland University, USA

The purpose of the study is to develop and use innovative instruction approach in higher education. Based on the National Educational Technology Standards, this research project is aimed to help pre-service and in-service teachers integrate digital technologies into education, and find effective ways to balance traditional and digital learning environment. Participants in this study are undergraduate students (N=20) and graduate students (N=20) in the teacher preparation program from a mid-western American university. Participants learn how to use appropriate technological tools to create digital stories, reflecting on their understanding and perspectives on how technology can be effectively used to enhance learning of traditional and new literacies. The findings add to the understanding of how a variety of technology-based experiences can expand and enhance what is happening in today and tomorrow's classrooms, and help learners develop useful and flexible learning skills during a transition period of technology applications in education.

Rethinking Blog-Integrated EFL Curricula: A Reflection on Participation and Learning

Mei-Ya Liang, National Central University, Taiwan

In recent years, the weblog has become a popular Internet learning and communication environment, but its pedagogical potential for participation and learning in English as a foreign language (EFL) contexts has not yet been fully explored. Using action research methodology, the researcher participated in the design and implementation of three blog-integrated EFL curricula and evaluated them. The study supports the position that Web communities can promote higher levels of learning and participation through certain instructional strategies. However, students' linguistic, social, and technical difficulty also leads us to rethink pedagogical issues related to learning and participation in EFL contexts. This paper provides discussions and suggestions for future design of Web-based interactions in post-secondary English courses.

Principals And Teacher Attention! Use Technology To Improve The Quality Of Staff Development Programs Through Web-based Instruction In Public Junior High Schools Of Kaohsiung City And County, Taiwan

Yu-Wen Liao, Tzong-Song Wang, Tajen University, Taiwan

The teachers must update their teaching skills and knowledge to meet the needs of their students after they get into the real classroom. The teachers' professional development program is an opportunity for teachers to update their skills for teaching. The best way to help students realize academic success is to employ teachers who focus on encouragement and instruction. The purpose of this study was to investigate the involvement of principals and teachers in staff development programs through web-based instruction in public junior high schools. The methodology was using survey and interview instruments based upon a review of related literature and research. All inferential statistics, including t tests, factor analysis, ANOVAs,

and Tukey's were used to analyze the data gathered for this research. There was a significant difference observed that principals tend to have a more positive attitude toward staff development through web-based instruction than do teachers.

Improving Team Collaboration in Treatments for Autism Spectrum Disorder

Lars Liden, Kevin MacDonald, Christina Whalen, TeachTown, USA

Autism Spectrum Disorder is a class of disorders involving severe cognitive, social and language deficits. Using behavioral programs therapists can substantially improve a child's quality of life. However as such programs typically involve teams of individuals including teachers, clinician and parents, communication between team members can frequently be challenging and result in less than ideal treatment. This paper discusses how an internet hosted service and a novel approach to e-mail provides a more consistent and potentially effective treatment program.

Exploring the Effect of Verbal versus Pictorial Evidences in Solving a Historical Problem: Implications for the Instructional Design of Multimedia Materials

Margarita Limón, Universidad Autónoma de Madrid, Spain

This paper is part of a wider research that explored the interrelationships between learners' characteristics (interest, prior knowledge, self-regulation abilities or epistemological beliefs), and multimedia learning materials' characteristics (e.g. type of information presented) to maximize individuals' learning. Here, I focus on the effect of presenting: verbal evidences (historians' accounts or press fragments), predominantly graphical evidences (cartoons, maps, bar charts) or both, in individuals' ill-defined problem solving and learning. The content of the problem was historical: the USA-Spain War held in Cuba in 1898. Evidences supporting each side views (that is, the USA and the Spain governments' arguments for war) were presented. Preliminary results showed interesting significant differences among the three experimental conditions regarding participants' learning and recall. Implications for instructional design of efficient multimedia learning environments will be developed

Instructional Strategies and Mechanisms on E-Learning for Nurturing Appreciative, Expressive and Creative Abilities

Chin-Chih Lin, Department of Industrial Technology Education, National Kaohsiung Normal University, Taiwan (R.O.C.), Taiwan; Chien-Chung Lin, Business Administration & Management, Meiho Institute of Technology, Taiwan (R.O.C.), Taiwan; Garry Chen, Cornell University CIT-IS, USA, USA

This study was to find out the proper instructional strategies and mechanisms on e-Learning for teachers in elementary and junior high schools to nurture student's appreciative, expressive and creative abilities. By analyses the literature and expert's conversazione, the questionnaire was developed. The thirty five subjects of study included the teachers who specialize in information technology and teach in Science and Living-technology curriculum in elementary and junior high schools. The return rate was 85.7%. The findings in this study on proper instructional strategies were listed in sequence as Theme Teaching, Heuristic Thinking, Creative Thinking, Appreciative Teaching, and CORT Thinking. And the proper mechanisms were the Multimedia webpage and Webpage developing software. And the finding of above indicated that the instructional mechanisms were appropriate to all the grade levels of the students, except the Grade 1 to Grade 2 junior levels pupils.

Supporting Learning Context-aware and Auto-notification Mechanism on an Examination System

Fong-Jheng Lin, National Sun Yat-sen University, Taiwan; Chu-Sing Yang, National Cheng Kung University, Taiwan; Yu-Sheng Yang, Texas State University-San Marcos, USA

In the traditional educational theory, analysis of score mainly applies on single examination. Most teachings are one-to-many relation in common learning environment. One teacher has responsibility to control lots of learning progresses at the same time. Comparing with traditional written examination, online examination system on learning platform has advantages in full record of examination score and powerful computing ability to aid teacher in monitoring and management. This research starts from an existed examination system, and tries to transform each learning curve consisting of scores to various learning context. With these analysis reports, performs of students in next examination can be forecasted. Cooperating with auto-notification system, the teacher can be notified with the report of students in specific learning context, or the system can response corresponding reactions automatically to reduce burdens of the teacher and attain the purpose of personalized learning feedback. Keywords: examination system, learning curve, learning context

Learning from animation: The effect of prior knowledge and navigation mode

Huifen Lin, Kun Shan University, Taiwan

The purpose of this study was to examine the instructional effectiveness of different navigation modes (linear and nonlinear) in facilitating achievement of students identified as possessing different levels of prior knowledge. Sixty eight undergraduate students were randomly assigned to treatments and received four criterion tests designed to measure different educational objectives immediately after interacting with their respective instruction. Results indicated that insignificant differences in achievement existed between treatments on each criterion measure. Interaction between navigation mode and prior knowledge level was also found to be insignificant. Findings indicated that alternative navigation strategies, although structurally different, may not be functionally different and that differences in navigation strategies do not compensate for differences in prior knowledge.

The Pilot Study on the Impacts of 3D Compound Virtual Reality Field Trip toward Students' Academic Achievements

Ming-Chao Lin, Chun-Yen Chang, Department of Earth Sciences, National Taiwan Normal University, Taiwan

In this Pilot Study, we build the 3D Compound Virtual Field Trip (3D-CVFT) system by combining the Graphic-based VR and the Image-based VR. In the group discussion by instant message, the more active discussion performance, the lower

score in 3D-CVFT Test. According to the replies of VFT system questionnaire, this pilot studies figure out the advantage of each kind of virtual reality technology, and the way of future work.

Blended learning in graduate program of study via script project

Konstantinos Liotsios, Aristotle University of Thessaloniki, Greece; Stavros Demetradis, Andreas Pombortsis, Aristotle Univ of Thessaloniki, Greece

This case study is about the planning and application of blended learning activities at a graduate level. The research question concerns about the proper blended learning design, which will cover effectively the particular educational needs of graduate students. The course was organized and offered with the incorporation of online learning activities in traditional onsite ones. The research design aimed at dealing with the increase of transactional distance and the guarantee of the students' efficient active attendance, which emerge as usual problems in distance learning. The stu-dents' attendance was ensured through the requirement of project preparation with collaborative learning activities. The findings reveal that: a) the choice of a proper real script preparation project gains the interest of students and it ensures their active attendance and b) the organization of the educational process alternating individual study and team collaboration for the project preparation, are prerequisite for the successful blended learning design.

New Video Character Extraction Algorithms for Multimedia Learning

Shijin Liu, College of Physics,Huazhong Normal Unviersity., China

As we know, the text in videos presented important information, and videos are the most primary information source in multimedia learning environment. This paper presents a new method to automatically localize captions in video, and realized to recognize the localized Text Area and clean up the background and noise, then detection the text via the OCR. Based on these algorithms, we give a new solution of managing the multimedia learning information and multimedia resource store.

A Study on the Enhancement of Students' Writing Performance through Peer review with Discussion in a Wireless Environment

Tzu-Chien Liu, Yu Wang, Hwa-Wei Ko, Ssu-Chin Wang, National Central University, Taiwan

Peer review and discussion has the potential to support students to hold effective audience awareness, and then enhance students' writing performances. Wireless learning environment can provide students with multiple interaction channels for the implementation of peer review and discussion. The major purpose of this study is to construct a wireless peer review environment and to carry out a field experiment to explore the effectiveness of peer review and discussion in enhancing student's ability and interest in writing. The results of this study showed that under a wireless learning environment, peer review with discussion group is significantly superior to peer review group on writing performance. Besides, high score students and low score students benefit most from peer review with discussion. Finally, peer review with discussion can help students get the meaning of the scoring criteria, and benefit from the peer's feedback.

The effects of "IRS Supported Instruction Model" upon undergraduates' learning in introductory physics

Tzu-Chien Liu, Yi- Chun Lin, National Central University, Taiwan; Ching-Chi Chu, National Central University, Taiwan, Taiwan

In order to enhance the learning effectiveness of introductory physics, our research team had conducted a series of studies to develop "IRS Supported Instruction Model" (ISIM) according to the features of the teacher's teaching methods and introductory physics. For evaluating the effectiveness of ISIM, the current study explored, by field experiment, the classroom interaction and students' achievements in introductory physics courses that the teacher teaching with ISIM or with lectures. The current study results showed that the student-instructor interaction of the experimental group was substantially enhanced, and students under the teaching with ISIM showed better performance in the learning achievements comparing with the students under lecture method. Furthermore, the students' attendance was excellent.

The Effects of students' cognitive styles upon applying computer multimedia to change statistical misconceptions

Tzu-Chien Liu, National Central University, Taiwan; Dr Kinshuk, Athabasca University, Canada; Ssu Chin Wang, Yi Chun Lin, National Central University, Taiwan; Oscar Lin, Maiga Chang, Athabasca University, Canada

The purpose of current study was to adopt an experiment to explore the relationship among students' cognitive styles, learning processes and learning performances under students learning with computer multimedia for eradicating statistical misconceptions. Twenty eight undergraduates with different cognitive styles (imagers or verbalizers) were selected as the subjects. The study results displayed that students with different cognitive styles indeed show preference in different representations and then have different learning processes during learning with computer with multimedia. Besides, both imagers and verbalizers can effectively reduce their statistical misconceptions by learning with computer multimedia. However, the imagers can better reduce the more misconceptions through learning with computer multimedia effectively than the verbalizers

Literature Review: Students' Online Learning Communities in Higher Education

Ying Liu, Eun Jung Oh, University of Georgia, USA

This literature review synthesizes recent research focused on online learning communities in higher education. It discusses the following emerging research themes: 1) understanding online communities and the community-building process, 2) student perceptions and experiences of online communities, 3) design, practices, and strategies supporting these communities. Regarding research approaches, researchers in this area have employed case study research, action research, survey research, and design-based research for their studies. Issues concerning data collection and analysis methods are also

addressed. Finally, the literature review suggests future research directions and challenges that researchers encounter in developing new insights concerning learners and online learning communities.

From Assessment Mandate to Course Delivery System:The E-Learning Journey of One College of Education

James Lockard, Wei-chen Hung, Northern Illinois University, USA

In this "best practices" session the presenters will describe their journey from an e-portfolio assessment mandate to expanded use of a commercial portfolio system into a full-fledged course management system that has replaced used of BlackBoard for some faculty. The session will demonstrate sample courses that integrate course delivery and student product assessment, all aligned to state and national standards in Instructional Technology and Library Information Systems. The presentation will candidly discuss challenges encountered and solutions tried, both successful and unsuccessful, from the perspectives of both faculty and students. The lessons learned are applicable broadly to the implementation of e-learning on a large scale with minimal resources and little time.

The Design and Performance of Intermediate Constraint Questions for an On-Line, Introductory Course in Natural Science

Raymond DeFrain, Ralph Locklin, Jacqueline Sturgeon, Paul Howell, The Pennsylvania State University, USA

The authors have developed and evaluated an on-line, open-book quiz database for an introductory course in the natural sciences. The quiz database has proved to be remarkably robust, and its integrity has not been compromised after four years of use; average quiz scores have not shown any systematic change with time. However, both as a response to critics who complain of excessive use of multiple choice questions and in an attempt to increase the effectiveness of the course in promoting scientific literacy, we have explored the use of questions that require students to make not one response on test questions, but several responses to tightly related or complex questions. We present information about these "intermediate constraint" questions, and show how these question types add to the evaluation of student progress. We also show that these question types effectively discriminate between students that prepare well and those that do not.

Becoming multiliterate: Digital video news construction within a technology-supported learning environment.

Lori Lockyer, University of Wollonong, Australia

Twenty-first century literacies imply multiliteracies – going beyond language literacy and numeracy to, among others, information, visual, media and technological literacies. An education that develops capabilities across a range of literacies equips young people with the skills necessary to participate in a complex, globalised workplace and community. A key step toward realising such national and state education agendas is specific curriculum interventions that are translated to the classroom level. This paper reports on a case study that explored both the process and outcomes of the implementation of an education program which was designed to incorporate multiliteracies.

Elearning in initial science teachers education

Maria João Loureiro, Universidade de Aveiro, Portugal; Teresa Bettencourt, Francislê Neri de Sousa, Luís Marques, University of Aveiro, Portugal

The present proposal aims at the presentation and discussion of an experiment involving the exploitation of elearning tools in the context of initial teacher education, specially within a course on Science Education. The elearning tools were used both to provide: i) orientations on the tasks to be accomplished by the students; ii) information concerning recommended readings, as well as material used in class; iii) interaction between students and between them and their tutors. In order to promote reflexive thinking, students were stimulated to ask questions about the themes under discussion, using the forums, outside class time. We draw some reflections about this experiment, namely that evaluation must take into interaction account and teachers should support students, so as to enhance higher level questioning, inviting them to compare their opinions with those of their colleagues.

Integrating Eassessment as an Inmost Part of the Teaching and Learning Process

Maria João Loureiro, Universidade of Aveiro, Portugal; Lúcia Pombo, University of Aveiro, Portugal; Ana Jorge Balula Dias, ESTGA - University of Aveiro, Portugal; António Moreira, University of Aveiro, Portugal

This work aims at presenting the eassessment framework underlying the course of Evaluation of Educational Software (EES), which integrates the Master's Course on Multimedia in Education of the University of Aveiro. Consequently, the eassessment practices of this course, involving both teachers and students, is described and analysed, taking into account the current thinking regarding eassessment and Higher Education – i.e. the orientations inherent to the Bologna Declaration. First we will discuss to what extent the eassessment is embedded in the learning process in the EES course. We will also reflect upon the constraints and potentialities of the strategies and tools used. Some of the identified problems have to do with the difficulty in assessing the students' individual performance online and the excessive (student and teacher) workload implied. Finally, suggestions for future research are put forward, e.g. to develop further studies making use of action¬-research methodologies, in order to conceive and develop eassessment tools to minor the limitations identified.

Pedagogical Implications of Using Learner-Controlled, Web-based Tools for Learning

Gretchen Lowerison, Richard F Schmid, Concordia University, Canada

Students from a graduate class in educational computing took part in a study exploring the effectiveness of learner-controlled, web-based tools to support knowledge building and self-regulation. Learners were randomly divided into one of five study groups: Moodle (collaborative, structured linear environment), Blog (collaborative, unstructured linear environment), TikiWiki and MediaWiki (collaborative, dynamic environment), and free choice. Data came from self-report surveys, learning journals, content analysis of artifacts, and final grade. Results indicate that learners perceive that Blogs and Wikis promote increased collaboration, dialog and active engagement. Learners who are less familiar with the knowledge

domain and / or the technology prefer a more structured, instructor guided learning environment. Implications for use of these tools to support learning will be discussed.

Consider the Source: Developing Primary Research Articles within an Educational Digital Library for Curriculum Enrichment and Online Collaboration

Michael Luby, National Science Digital Library Core Integration Group, USA

It is widely accepted that authentic research from primary articles holds great value for augmenting curricula within disciplines centered on empirical investigation. The National Science Digital Library (NSDL), http://nsdl.org, is a virtual library of distributed resources, patron services, and premium collections created by the National Science Foundation to enhance science education and resource discovery at all levels. We have begun to undertake a program that will make primary research articles easily available for teaching in an array of institutional settings beyond well-endowed research universities by expanding metadata-sharing arrangements with a group of scholarly publishers and aggregators. Two models presently under development, "Timely Teaching" and "Classic Articles in Context," will incorporate current and landmark full text articles into online modules within a larger educational digital library. Modules will be curated and edited by subject experts and presented through interactive collaborative spaces and disciplinary sections of the Library network.

The Myth of the Negative Influence of Convenience on Students' Assessment of their Online Learning

Robert Lucking, Old Dominion University, USA; Ed Christmann, Slippery Rock University, USA; Merv Wighting, Regent University, USA

Critics of distance learning contend that students come to these venues expecting less and receiving less, all in the name of convenience. This presentation will share findings from a research study that examined the impact of students' desire for convenience on their assessment of their learning experiences. These findings suggest that, contrary to the commonly-held perception, students who identify themselves as seeking convenience in their learning are not less demanding than students in regular classrooms, and they are not selling their souls to the academic devil.

Evaluating Learning Objects with an Online Version of the Learning Object Review Instrument: Results of a Design Study

Robert Luke, George Brown College, Canada; Devon Mallory, Centennial College, Canada; Richard Pinet, Andre Seguin, University of Ottawa, Canada

This paper presents an overview of a research project that is investigating the peer review evaluation process in conjunction with the production of learning objects. Specifically, we are investigating how distributed communities can collaborate on the review of learning objects. The purpose of our research project is to evaluate an online version of a standard instrument for learning object review and determine its effectiveness as a mechanism for peer review within collaborative development cycles. Our research goals fall under two broad categories: 1) using online communication models to enable convergent participation in the review of learning objects and integrating this within iterative development cycles; and 2) investigating the role of peer review and the embedding of an online learning object evaluation tool within standard LOR check in/out processes. In addition, we are investigating the potential usefulness of including evaluation results within learning object metadata.

Online Interprofessional Health Sciences Education: Designing Inter-institutional E-Learning

Robert Luke, The Institute for Interprofessional Health Sciences Education, Canada; Patty Solomon, Sue Baptiste, McMaster University, Canada; Pippa Hall, University of Ottawa, Canada; Carole Orchard, University of Western Ontario, Canada; Ellen Rukhom, Laurentian University, Canada

The Institute for Interprofessional Health Sciences Education (IIHSE/IEISS – the Institute) is a virtual learning institute working collaboratively to construct online leaning for interprofessional health education. The IIHSE is innovating e-learning on several levels by creating Online, asynchronous education materials to support interprofessional health sciences education for undergraduates and for professional, in-service education; A collaborative inter-institutional structure for continued content creation; Inter-institutional access to electronic libraries and resources. This paper outlines the challenges and opportunities encountered in the design of online, interprofessional health sciences education that involves multiple educational and clinical service institutions. We discuss issues associated with distributed authoring of content, copyright and intellectual property issues, online library access for students from multiple universities, student articulation among disparate institutions, technical and educational support for distributed content authors and students.

The Impact of an Online Course in Infection Control on Health Providers' Competency

Robert Luke, George Brown College, Canada

Hospital-acquired infection, international travel and bacterial resistance are among the factors contributing to a heightened awareness of the importance of infection prevention and control in today's health care environment. A research project was conducted to develop an online course in infection control for health providers and study the impact on providers' competency. The study was funded by The Change Foundation and the Ontario Ministry of Health and Long Term Care. Survey results from 76 learners indicated that they made significant gains in competency and improved their workplace practice. Providers who worked in supportive organizations reported a higher incidence of knowledge transfer activities. Two course design features, video and interactive quizzes and games, enhanced the learning experience. The online course was an effective and satisfactory way to improve providers' infection control skills. A demonstration of the course and best practice recommendations for organizational integration and uptake based will be presented.

Investigating Concerns of Teacher Education Students about the Integration of Online Learning Communities in Traditional Instruction

Denys Lupshenyuk, York University, Canada; Martha Hocutt, Elizabeth Gibbs, The University of West Alabama, USA

The contemporary capabilities of the Internet provide students and teachers with the opportunity to interact and collaborate with one another in an online environment outside their classroom to supplement the face-to-face learning. The success of educational process "outside the classroom" via cutting edge technology often depends upon teachers' positive attitudes towards technology and their strong confidence in technology integration. This paper examined concerns of graduate students in teacher education program about the incorporation of this innovation into traditional instruction. Following the direction given by the review of recent studies, the researchers investigated the intensity of graduate students' concerns about infusing online learning communities in curriculum and instruction. The findings of this research show the increase of concerns about online learning communities for teacher education students from rural area in west Alabama.

The Usefulness of Media-Rich Problem-based Learning to the Training of Chinese Student Teachers

Angela Ma, The Hong Kong Institute of Education, Hong Kong

The development of multimedia educational courseware on Problem-based Learning (PBL) in this study is expected to probe into how student teachers of various disciplines responded to a particular educational product that involved media-based educational triggers, and their attitudes to the potential technological development in fostering student-centred learning in general and problem-based learning in particular, with the ultimate goal of enhancing and improving the quality of teacher training. Two lines of inquiry have, thus, been followed throughout the investigation: i) to identify and describe the various student group attitudes towards the newly developed video-rich PBL triggers; and ii) to explore how such educational courseware can be used, enhanced, and presented as examples of learning objects in actual teaching situations. The implications and recommendations arising from the findings obtained in this research project will provide teacher educators with some initial insights when using similar media–based products in teacher education.

Extending the E-Learning Experience by Using Mobile Technology

Kathryn Mac Callum, Lynn Jeffrey, Massey University, New Zealand; Kinshuk Kinshuk, Athabasca University, Canada

Mobile technology offers learning institutes the opportunity to extend e-learning opportunities and enable students the opportunity to have more control over their learning. Mobile technology truly enables learning to take place were and when the learner wants to learn. Discussion board are typically used in teaching to enable students to collaborate and interact outside class time. These discussion boards seem particularly well suited to mobile enhancements given that their effectiveness depends heavily on active participation and timely posting/response cycles. This paper details a study that is currently being undertaken at Massey University, New Zealand that is looking at the issue of enabling students to participate with a discussion board on a device-scaled form. This paper details the motivation behind the study as well as design of the system that will used to test the concept.

Knowledge Translation of Interprofessional Collaborative Patient-Centred Practice

Colla MacDonald, Doug Archibald, University of Ottawa, Canada; Emma Stodel, Learning4excellence, Canada; Larry Chambers, Elisabeth Bruyere Research Institute, Canada; Pippa Hall, SCO Health Service, Canada

The purpose of the Working Together project was to design, develop, deliver, and evaluate an online collaborative patient-centred practice (ICPCP) learning resource for healthcare teams to facilitate knowledge translation in long-term care. Lavis et al.'s (2003) framework was used to frame this study. Seventeen not for profit/charitable long-term care homes across Ontario, Canada participated in this project, involving 59 healthcare teams of pharmacists, physicians, nurses, and/or nurse practitioners. The Working Together project evaluated the effectiveness of knowledge translation by using the Demand-Driven Learning Model (DDLM) evaluation tool (MacDonald, Breithaupt, Stodel, Farres, & Gabriel, 2002) to assess learners' reactions to the learning resource. Data from quantitative pre-post surveys and qualitative interviews provided evidence that learners found using the resource to be a satisfactory learning experience, obtained new knowledge and skills regarding ICPCP, transferred knowledge to the workplace, and that their learning had a positive effect on the residents.

A Professional Learning Community in Senior High Science: Data Logging and Learner-Centeredness

Ron MacDonald, Angela Larter, University of Prince Edward Island, Canada

Abstract: Technology integration occurs most effectively when students take ownership of their education (Dexter, Anderson, & Becker, 2000); this results in a learner-centered rather than teacher-centered learning environment (McCombs, 2002). One particular technology resource that has shown promise is the data logger (Rodrigues, 2003). However, its potential has been largely unrealized because of inappropriate professional development (Seah, Tan, Hedberg, & Koh, 2005). During this mixed-method study, carried out at a senior high school in Prince Edward Island, Canada, a professional learning community was developed. Findings indicated that science teachers hold pedagogical perspectives which define the group's identity (John, 2005). Teachers' core values appear to be incongruent and threatened by learner-centered technology integration. However, research results suggest that a professional learning community can provide a mechanism to alleviate this perceived threat.

Service-oriented Learning Sequencing for Course Customization

Ivan Madjarov, Aix-Marseille Université, France

Learning content customization is a dynamic process supported by a set of standards-based data models. The customized learning content is delivered to learners as managed sequences of learning activities which form a hierarchical structure that can be modeled by means of Petri Nets. In this paper we discuss a learning model that enables the creation of optimal learning strategies that suit learners' needs. Learning objects are sequenced according to learners' responses to exercises and questions. The approach we adopted is implemented by means of Web services in a service-based learning architecture.

A different way of learning Tourism Marketing, supported by a technological platform.

Ma. Magdalena Maldonado Avalos, Adolfo Fuentes Negrete, National Polytechnic Institute (IPN) School of Tourism, Mexico

At National Polytechnic Institute (IPN) , the second largest public university in México, in the last years, we have been working for the implementation of a New Model of Learning. The Didactical plan implies not only the academic topics, also includes the development of abilities, competences, attitudes and worths. In one hand, it is important to include Active Didactical Strategies, in which the students are the responsible in their learning; in the other hand, the technology has tools that are very helpful in order to facilitate the communication, and all the work that the students has to do. In the course "Tourism Marketing" a subject part of the program of a master in Business Administration in Tourism, we are using a technological support called Blackboard, as an innovative way of improve the learning for our students.

Virtual Training – Towards a Design Framework

Lennart Malmskold, Saab Automobile, Sweden; Roland Ortengren, Chalmers University of Technology, Sweden; Blair E Carlson, Saab Automobile, Sweden; Lars Svensson, University West, Sweden

This paper presents a theoretical framework for the knowledge phases in automotive assembly work. The framework provides a foundation for the development of new training methods that can meet the impending challenges in the highly competitive automotive industry: Shorter lead times in product development and reduced number of hardware. This has implications on operator training for the production units, who find themselves without practising objects. Virtual prototypes are on the other hand becoming more and more important, and finding ways to incorporate them in a training context is a promising solution though one which calls for further research. This paper presents and discusses a framework which can be used for understanding the learning processes and learning trajectories of operator training, and as a theoretical foundation for designing novel techno-pedagogical models for virtual training.

ARCS Model and Instructional Design for Adult Learners in Online Learning Environment

Jin Mao, Melody Thompson, Penn State University, USA

Many educators and researchers consider learner motivation as one of the most important factors leading to success in traditional learning environments. Learner motivation plays a similarly important role in online learning. However, very little consideration of motivation has been integrated into instructional design in general, especially in the design of online learning. Using the framework of Keller's ARCS Motivation Model, this paper discusses and recommends course design strategies for adult learners in online learning environments.

Use Virtual Peer Review as an Assessment and Collaboration Tool

Jin Mao, Penn State University, USA

Community, participation, and learner engagement seem to be the main issues in online teaching and learning, and communication is at the heart of these issues. With a high percentage of text-based communication, written projects, either online discussions or essay writing, have been playing a more important role in online environments than in face-to-face instruction. Considering what is really happening in online classrooms regarding learning community, learner participation and engagement, this paper intends to discuss and propose virtual peer review as an assessment and collaboration tool to enhance communication and learner engagement.

Evaluation of oral comprehension of Amazonian tales: making a diagnosis of conceptual maps with PIPA software

Maria Suzana Marc Amoretti, Andréa Mendonça, Cícero Santos, LEAD SEMIÓTICA, Brazil

Through this article we analyse a few aspects of semiotic categorisation (French Semiotics) which are necessarily present in the process of oral textual comprehension. Conceptual maps were performed after reading folkloric tales derived from Amazonian region. The research's objective is to evaluate in which way principles of inclusion, restriction and imbrication are part of text's comprehension. The methodology applies performing conceptual maps based on reading. Our research is part of a interdisciplinar project which integrates the dimension of informatics to its aims, through the support tool PIPA. The specificity of this software is to enable us to test on a large scale the relations of inclusion, restriction and imbrication, which are in concept maps, in an automatic way, considering referential categorisations and guaranteeing, as far as possible, the validity of the various research phases inside a domain which is extremely sensitive to the effects of subjectivity.

Experience in Plurimodal Teaching in Administration : tools and results

Anne Marrec, ENAP, Canada; Louise Sauvé, Télé-université / SAVIE, Canada

This presentation will discuss the sociological observations and educational results of a plurimodal teaching experience in administration at the master's level, which took place at ÉNAP. These observations are found in the presenters' work on the management of virtual organizations and in the research on educational technology done by the Centre of expertise and

research in lifelong learning (SAVIE). The multimodal educational strategy of the "technological transformations and GRH" course will be discussed. The course aims to sensitize students to the process of change induced by the "virtualization" of organizations and to encourage them appropriate humanizing technologies in a positive way. The class simulates an organization in which synchronous and asynchronous communications technologies are progressively introduced while superimposed on the "presential". The presenters will expose this original techno-pedagogical approach and its results from a widened multi-institutional usage perspective.

MCN Healthcare: On-Line Education Programs and Learning Management System

Dawna Martich, MCN Healthcare, USA

Ensuring its staff is well educated should be an important goal to all healthcare organizations for three important reasons. Nurses and allied professionals must be able to demonstrate they both understand and can apply current patient safety standards. A workforce that is well trained typically has less turn-over, works more efficiently, and is therefore more valuable to its employer. Last, organizations which invest in an education and competency program may reduce its potential risks. MCN™ Healthcare provides edept®, a unique combination of on-line education courses and intuitive learning management application in one package. Designed to be utilized by all levels of healthcare workers; it is simple to implement and easy to use: track an individual's progress, create new training programs, or select from one of MCN's 1,000 pre-written courses. Edept is the only LMS built by healthcare experts, specifically for how healthcare works.

Microsoft PowerPoint as an Interactive Theatre Learning Tool

Amy C. Martin, Jeffrey Kenton, Towson University, USA

The use of Microsoft PowerPoint as a presentation tool is an accepted practice in most secondary schools. The software supports conveying information using readily available technology such as a computer and LCD projector. While PowerPoint is an accessible piece of software that allows even the novice user to create effective presentations, the use of this software exclusively as a lecture supplement does not harness its true potential as an E-learning tool. We argue that PowerPoint can be employed as an interactive experience to teach a variety of different subjects. In the case of this presentation, PowerPoint was used to create an interactive tutorial on the foundations, materials and applications of stage makeup. The tutorial was designed for beginning and intermediate high school theatre students.

MERLINGO – Central Repository of Multimedia Learning Objects with Support of Mediasite EX Server Environment

Ivo Martinik, VŠB-Technical University of Ostrava, Czech Republic

This paper presents the main goals and characteristics of the MERLINGO (MEdiasite Repository of LearnING Objects) project and its key component - Mediasite EX Server environment. It focuses on the building of the central repository of multimedia learning objects containing teachers' presentations and accessible on-line and on-demand. Central repository services can be used by all universities in the Czech Republic within the national academic computer network CESNET2 environment. Mediasite EX Server product gives a unified platform for not only streaming and archiving online presentations, but also for securing, organizing, customizing and managing a library of multimedia content.

Strategies of managing adolescent violent behavior in public schools

Solomon Maseko, University of South Africa, South Africa

ABSTRACT.Adolescent violent behaviour in township secondary schools is multifaceted and its origin is located in classroom management and appropriate teaching strategies. In this study three secondary schools with history of adolescent violent behaviour were purposely selected. The principal, teachers, parent and student leaders were interviews to show the type of adolescent violent behaviour in the classroom and how teachers deal with the problem effectively. The results show that schools using corporal punishment and functionalist managerial strategies regarding problem learners, experiences a low level of classroom disruptions.

Development of On-Line Test Materials with a Checklist for Information Literacy Education

Ryuichi Matsuba, Hiroshi Nakano, Sachi Takahashi, Toshihiro Kita, Shirou Kitamura, Masahiro Migita, Kenichi Sugitani, Norio Iriguchi, Yasuo Musashi, Kazutaka Tsuji, Masaru Shimamoto, Takeshi Kida, Tsuyoshi Usagawa, Kumamoto University, Japan

We report on the development of on-line test (exam) materials for information literacy education with the use of a checklist. Some points of view to improve materials have been known by prior studies and we could collect and list up checking items to assess and improve on-line test materials. We show the results of our development of materials by comparing the score distributions before and after the improvement.

Collaborative Web-microteaching: CSCL Function and Authoring Function of Instructional Activities Game

Toshiki Matsuda, Natsuko Ishii, Kenji Goto, Tokyo Institute of Technology, Japan

In the present study, we have improved and extended the functions of the Instructional Activities Game [IAG] (Matsuda and Ishii 2006) so that it can be used as a tool for student teachers to exchange ideas and comments to improve their lesson plans and generalize their experience in ID tasks and practice teaching. In addition, in order to encourage student teachers to design leaner-centered activities in their lesson plan, we add the function to describe a lesson plan in which an IAG game material is used as well as the function to generate its game board. Moreover, we conducted an experiment to verify the effect of the new functions.

Introduction to and the practice result of blended e-Learning on "Introduction to Information Technology"

Toyoji Matsumoto, Information Media Center of Kanazawa University, Japan; Yusuke Horii, Research Center for Higher Education of Kanazawa University, Japan; Tsuneo Suzuki, Masahide Sato, Information Media Center of Kanazawa University, Japan

In 2006, Kanazawa University(KU) adopted a policy that made it mandatory for all freshmen to have a laptop PC and started a new class called Introduction to Information Technology as a compulsory subject to all freshmen. This class is designed as the first step in developing an e-Learning environment across all departments. We decided to develop the class mainly as blended e-Learning which combines both the conventional face-to-face class lecture and the e-Learning. Wireless stations have been placed at strategic locations in the classroom so the students can always access LMS by using their laptop-PC's. We registered all the teachers' and students' ID's, and we also registered all the basic subjects in LMS in order to start using LMS as soon as a teacher wanted to use it. The class Introduction to Information Technology that used e-Learning was given a good evaluation by more than 70% of the respondents of the class questionnaire. In this paper, we show the outline of the design, practice and the results of the class in its first year.

Faculty Website: Learning Location

Margaret Maughan, State University of New York, USA

The issue of social justice with regard to the universal access to resources is a serious concern in contemporary higher education. The limitations on content and the financial expense of university textbooks have been resolved by one instructor via the use of her website. Students in the education program download the assigned readings from the instructor's website. These include a series of PowerPoint presentations that highlight the key ideas, a directory of assignments and their assessment instruments, as well as hyperlinks to relevant online research journals.

Coping With the Copy-Paste-Syndrome

Hermann Maurer, Narayanan Kulathuramaiyer, Graz University of Technology, Austria

The Copy-Paste Syndrome describes a situation whereby students at all levels are becoming more and more reliant on wide-range of easily-available digital content. This is a universal problem that has to be addressed effectively, especially with the revolutionary development of the Web. Weber (Weber, 2006) refers to it as the Google-Copy-Paste-Syndrome, which according to him will drastically affect the quality of scientific publications, leading to a degradation of the quality of life. The expansion of digital content together with an emerging participative social learning (and E-learning) ecosystem could result in even more devastating implications. As opportunities for the proliferation of such infringements becomes widespread, a holistic solution is required combining an institutional approach together with the application of viable technologies. This paper describes an E-learning ecosystem combined with a copy-paste detection suite to comprehensively address the emerging phenomenon.

E-Quiz - A Simple Tool to Enhance Intra-Organisational Knowledge Management eLearning and Edutainment Training

Hermann Maurer, Graz University of Technology, Austria; Wolfgang Schinagl, Styria Economic Chamber and Institut for Informations Systems and Computer Media, Austria

It has become increasingly necessary to motivate and actively involve users to provide quality feedback for the development of future versions of applications and services within whatever institution is at issue. For this purpose we have developed an E-Quiz game to accelerate the process of learning, understanding and the successful usage of new technologies and applications. The E-Quiz is based on a simple content management system where questions and answers can be defined, personal and organisational data can be stored and a rule system on performance scores can be executed. E-Quiz games are an integrated part within a new IT marketing strategy including internal eCommunity systems, which have evolved over the past few years in response to decreasing user acceptance caused by new applications and technologies. E-Quiz games are not limited to IT content and will be applied in the future to affirm general intra-organisational knowledge dissemination.

The JMU Faculty Summer Institute for Online Course Development: A Five-Year Summary of Results

Jim Mazoue, James Madison University, USA

As colleges and universities in the United States struggle to accommodate the influx of an addition 1.5 million students on their campuses in the next seven years, the opportunities and benefits afforded by online education are becoming increasingly apparent to students, faculty, and administrators. This session presents a model that can be adopted by institutions to build a successful online course development program that is not only cost-effective and self-supporting, but revenue generating. Now in its sixth year, the Faculty Summer Institute at James Madison University connects faculty development to online course creation in a way that serves both students' curricular needs and strategic institutional goals. Data from a five-year study of the Summer Institute demonstrate the feasibility of implementing similar low-cost/high-yield programs that can serve unmet instructional, programmatic, and institutional needs.

Professionalizing Online Learning Managers

Frank McCluskey, Phil McNair, American Public University System, USA

Online Learning is ending its childhood in many of the nation's colleges and universities. Growth in online classes is in excess of 20% in many institutions. In addition, online learning programs in other countries are now beginning to attract students from America. The impact that online education in higher education will have on budgets, tenure, workload and reengineering are yet to be realized in most institutions. With this maturity comes a new profession which I will call the Online Learning Professional (OLP). The skill set and qualifications of this profession are so unique that they designate a wholly new semantic domain. This short article will explore the short history of online learning in higher education and the emergence of the OLP.

Automated Operator and System Performance Assessment

William McCormack, Advanced Acoustic Concepts, USA

The Supportability Performance Assessment System (SPAS) was developed based on open source tools under the US Navy Small Business Innovation Research Program (SBIR). The effort focused on developing tools and processes to non-

invasively record and catalog user and system data, provide data playback and injection tools to stimulate the system, then leverage the data for training, assessment and performance support. SPAS was integrated with a fielded US Navy Anti-Submarine Warfare (ASW) combat system. In Phase Two of the effort, we demonstrated the utility of SPAS captured and cataloged data to support measurement and analysis. We developed proposed metrics for assessment of the target system and operators. We also demonstrated the use of SPAS data and tools for mission playback and reconstruction, operator training, performance assessment, and performance support.

Scaffolding for Experts: Trial not Error

Judi McCuaig, Alana Cordick, University of Guelph, Canada

Workplace computer users commonly resort to trial and error as a method for learning to use the new system. A training system that supports the user to complete real tasks while learning new software allows more productive use of time. Adaptive scaffolds can help these users be immediately productive with new systems, without requiring lengthy and inappropriate training courses targeted at novice users. We show that such a system can be created with simple models, no requirement for understanding the domain of the user, and minimal need for monitoring and observing user actions. The system does not tutor, but helps users learn new software packages by focusing their trials on strategies that will successfully complete tasks

From the Trenches: Best Practices in Reducing Online Faculty Workload

Shari McCurdy, University of Illinois at Springfield, USA; Kathleen Ives, The Sloan Consortium, USA

The search to work smarter not longer haunts all who teach online. Because we use technology to deliver our content, most of us also look to it to ease our way and solve our problems. We continually hope to find the elusive tools or means which can answer our prayers. Are there better instructional methods which can save us time and yet keep us connected to our students? Is there a better and faster way to maintain discussion boards? Is there software I can use to improve feedback or lessen my time online and still maintain high quality standards? This session will highlight the practices outlined by beginning and seasoned online instructors with a focus on saving time while maintaining quality and achieving learning outcomes.

Using the Secure Wiki for Teaching Scientific Collaborative

Roger McDonald, Department of Nutrition, USA

Writing clear and concise scientific manuscripts or reports represents an important aspect of science. Although most colleges and universities teach writing as an independent and solitary endeavor, collaborative writing is the norm in both the private and academic scientific sectors. Tools that aid both instructor and student in the art of collaborative writing have, in the past, been limited. Today, however, several computer mediums exits that help in teaching collaborative writing. One particularly useful tool is the Wiki. A Wiki consists of an easy to access website containing multiple pages of text and/or graphics linked together through hyperlinks. In this paper, I shall present a case for using the Wiki as a tool for teaching collaborative writing. To this end, I shall begin with a brief introduction to the Wiki followed by an example of a Wiki successfully being used in a course on nutrition and aging.

Methods for Formative Assessment of Online Courses

Dixie McGinty, Western Carolina University, USA

In this paper, we describe several methods of formative assessment that instructors can use to inform their own teaching. The first of these is the Online Course Assessment Tool (OCAT), an instrument designed at Western Carolina University for use by faculty in voluntary peer- or self-assessment of online courses. We also discuss issues raised during the beta testing of this instrument. The second half of the paper describes several specific techniques for ongoing assessment of student learning within a course, drawing from literature on classroom assessment in higher education.

Transformational Change: Moving Beyond Face to Face Instruction

Barbara McKenzie, Linda Haynes, Jason Huett, University of West Georgia, USA; Betul Ozkan, Long Island University, USA; Alison Shook, University of West Georgia, USA

This exploratory paper identifies the components of face-to-face classes that can be transformed to an online class format. In addition, the types of online practices essential for selected disciplines such as instructional technology, special education, counseling, educational leadership and research, and distance education are identified.

Applying Synergistic Design to Entrepreneurial, University-based, Online Learning

Paul McKey, Southern Cross University, Australia; Christine Geith, Michigan State University, USA

Making the transition from delivering online learning programs as part of a mainstream university curriculum to developing and delivering programs as an entrepreneurial academic business unit is not an easy one to make! Questions of ownership and resource sharing as well as structural and cultural differences require a need for establishing a more independent and commercially focussed mindset if the entity is to be successful. MSUGlobal has met these demands utilising a business modelling framework, Synergistic Design, to build a service-oriented culture and organisation that develops new academic ventures in diverse areas such as the equestrian and horticulture sectors.

Opportunities and Challenges of Synchronous and Asynchronous E Learning

Shannan McNair, Oakland University, USA; Celina Byers, Bloomsburg University, USA

Designing meaningful and effective E Learning can be a daunting task, but out mutual interest in technology and instructional design resulted in a useful dialogue and learning from one another. In this session we will share some of what we have learned as collaborative colleagues that resulted in higher levels of student engagement and learning. We use different methods and different teaching tools; one of us teaches synchronous classes while the other does asynchronous classes and does some courses hybrid – half face-to-face and half online. Similarities and differences in course design and

strategies for undergraduate, Masters and doctoral level students will be addressed. We will engage participants in discussion of the benefits and challenges of each method and provide some tips for avoiding common pitfalls. Meaningful and effective course design incorporates relevant content, accessible in ways that promote critical thinking and technology skill building.

Evaluation of SMART Multimedia Classrooms-Impact on Student E-Learning

Mary Nell McNeese, University of Southern Mississippi, USA

This study shares the results of the evaluation of the $1.78 million Title III-A U.S. Department of Education (USDoE) grant to the University of Southern Mississippi from 2001 to 2006. Its primary focus is the Faculty, Staff, and Graduate Students' (FSGS) assessment of the student learning and classroom participation in SMART® multimedia classrooms.

Teaching Middle School Ecology Using Virtual Reality

Mary Nell McNeese, Sherry Herron, Tulio Sulbaran, University of Southern Mississippi, USA

This project addresses the development and the field testing of a 3D immersive Virtual Reality (VR) environment of Pascagoula River sites for use with middle school students. This VR environment is used in conjunction with actual river field trips to the upstream site, the river mouth, and the Mississippi Sound. Protocols and lessons from the project Global Learning and Observations to Benefit the Environment (GLOBE™) are utilized in the development of both the VR and to field experiences environments. Screen shots of the VR prototype environment and the sequence of events in the VR environment are included.

Using Information and Communication Technologies (ICTs) in Teacher Education for Increasing Global Awareness

Sarah McPherson, Shiang-Kwei Wang, Hui-Yin Hsu, New York Institute of Technology, USA; Mengping Tsuei, Taipei Municipal University of Education, Taiwan; Ruth Wood, Kingston University, UK

Abstract. Educators need to prepare students for citizenship in a global society by creating an environment in which global awareness and attitudes can be learned. This study examined the use of information and communication technologies (ICTs) to facilitate knowledge exchange and communication between pre/in-service teachers in teacher preparation program in universities in three countries: the United States, England, and Taiwan. The purposes were (1) to increase teachers' awareness of globalization and prepare them to develop instruction in globalization in their classrooms, (2) to determine the feasibility of ICTs for collaboration between two countries, and (3) to assess use of ICTs (blogs, wikis, Google tools and digital story telling). The findings revealed participants gained important perspectives on global education, learned strategies to integrate global concepts into curriculum and instruction, and developed ICT skills for collaboration.

Integrating Interactive Learning Content into an Adaptive E-Learning System: Lessons Learned

Maram Meccawy, University of Nottingham, UK; Peter Brusilovsky, University of Pittsburgh, USA; Helen Ashman, University of Nottingham, UK; Michael Yudelson, Olena Scherbinina, University of Pittsburgh, USA

Adaptive E-Learning systems attempt to provide better service for learners by adapting to knowledge, goals, and interests of the learners. Despite many demonstrated benefits of this class of E-Learning systems, the lag behind non-adaptive learning management systems in one aspect - the ability to work with external interactive learning content. This paper analyses the problem of integrating external interactive content into an adaptive E-Learning system using a case study. We describe our recent project focused on integration of an interactive Boolean query simulation into an adaptive E-Learning framework ADAPT2 and summarize lessons learned.

Enhancing students' academic experience through learning communities with the development of a Collaborative Learning Project

Joseph Meloche, University of Wollongong, Australia; Yan Qi, Univerty of Wollongong, Australia

This paper describes as project that is designed to have students work in and create a community that is a blend between local (face to face) and remote (online) participants. The students are tasked to develop and implement the collaborative project as part of their assessed work in a large undergraduate Commerce subject. The aims of this project include improving students' multicultural awareness and team work skills and to promote internationalisation of the curriculum. The project will include research that is informed by the student participants. A significant part of the project is a review of the process as a report. The student's will reflect on their experience of the project both in the report and through diaries. This material will be analysed using used a new text-mining software tool that assists in analysis of text-based documents (transcripts) analysis through theme and concept identification. This approach is useful for addressing many research questions in qualitative analysis or mixed-method research.

Guiding students to acquire strategies for Web learning through Gym2Learn

Gianluca Merlo, Luciano Seta, Simona Ottaviano, Antonella Chifari, Giuseppe Chiazzese, Mario Allegra, Giovanni Todaro, Institute for Educational Technologies Italian National Research Council, Italy

In this paper we describe a new system to support students in acquiring cognitive strategies to control and monitor the comprehension of on line resources. After a short introduction presenting some studies concerning the application of metacognition in learning environments based on ICT, we illustrate the main features of Gym2Learn, a system developed at our Institute, within the framework of the CORFAD research project. Through the system, students can acquire cognitive strategies and an awareness of how to use them; then, using the features of the system, they can put into practice on the Web all the strategies acquired to improve their understanding of the educational contents.

Operating System Virtualization for management and delivery of E-learning

Chris Messom, Abdolhossein Sarrafzadeh, Anton Gerdelan, Martin Johnson, Massey University, New Zealand

This paper introduces an operating system virtual machine platform for deploying an e-learning environment. Managed e-learning environments are often web based and rely on a browser to minimize configuration on the client machine, however even in these scenarios it is not unusual to have very specific requirements of the client machine, browser type and version, JavaTM virtual machine version and even operating system. In the case of advanced e-learning tools such as affective intelligent tutoring systems, peer to peer collaboration tools etc, there are additional requirements associated with the affective sensors, camera, bio-mouse etc. An operating system virtual machine approach allows the software stack of the client to be pre-configured and distributed in one shot. This minimizes the client side configuration easing the adoption of the technology.

Breaking Down the Loneliness Barrier of the Student Teaching Experience: The Promise of the Digital Era

Connie Mietlicki, Governors State University, USA

Abstract: This paper reports on a case study of student teachers, broken in mini-cohorts, who were videotaped by their cooperating teachers with miniature video cameras, and who then uploaded these videotapes as movie files and subsequently shared them with their mini-cohort online support group for peer feedback and critique. During a 15-week practicum the case study attempted to see if this use of technology could break down the barrier of loneliness and separation that so many student teachers seem to experience, after having gone through a university career, typically enriched with much collaboration and teamwork, thereby generating an improved sense of confidence and success in the student teaching experience.

What Drives Corporate Profit Through E-learning?

Charles Yao Edem Mifetu, ABCON LTD, Ghana

Investment in e-learning without accompanying motivation which will bring about employee commitment is a waste of resources which will lead to decline in employee output and profitability. E-learning demands high level of commitment and self discipline for its investment to realise a return. If employee motivation is not taken seriously there will not be any employee self-discipline and commitment. This implies that holistic attention to strategic areas starting from Human Resource Management will inevitably have a positive ripple effect across the spectrum and consequently increase short and long-term profitability in any corporate. Furthermore, the needs of employees should be taken into account in all types of information technology and e-learning investments. This operational necessity brings us to the single driver model (Figure 1.1).

First Steps Towards a Synchronized Record System for Image Content and the Corresponding Emotional Reaction

Katsuaki Miike, Shobi University, Japan; Masateru Hishina, Tokyo International University, Japan; Nobutake Asaba, The University of Kitakyushu, Japan; Roberto Okada, Miyagi University, Japan

With the explosion in the amount of available audiovisual content, means for evaluating the content are required. Currently, the traditional methods are based on questionnaire surveys and interviews after watching the contents. However, as the images and sounds change continuously with time, while the questionnaire surveys and interviews are fragmentary in time, it is difficult to measure the audience's emotional reactions. To deal with this problem, we have proposed a system named "Content Evaluator (CE)", characterized by recording the audiovisual content together with the emotional reaction. Up to now, several experiments in order to verify the reliability and realizability were performed. As next step, we are considering the ways to deal with image delivery on the Web, such as lecture images and tutorial animations provided in e-Learning systems. In this paper, we report a proposal for new CE - ERICA - extended to deal with online images.

Web 2.0 Technologies for Social and Collaborative E-Learning

Mark Millard, Christopher Essex, Indiana University, USA

This paper focuses on educational applications of Web 2.0, a new form of network-based software in which the focus is on user-created content, which evolves through social interactions and collaboration with other users. The paper will offer participants an overview of various Web 2.0 technologies; provide examples and demonstration of several cutting-edge Web 2.0 technologies, and discuss best practices for utilization of Web 2.0 technologies for teaching and learning. Experiences and best practices in incorporating Web 2.0 technologies for instruction in organizational settings and higher education will be highlighted.

Teaching Medicine Without Patients- Are we there yet?

Yuri Millo, Yuri Millo, Yuri Millo, Yuri Millo, Yuri Millo, Yuri Millo, Yuri Millo, Yuri Millo, Yuri Millo, Yuri Millo, Joyce Donnellan, Joyce Donnellan, Joyce Donnellan, Joyce Donnellan, Joyce Donnellan, Joyce Donnellan, Joyce Donnellan, Joyce Donnellan, Joyce Donnellan, Joyce Donnellan, Pamela Leonard, Pamela Leonard, Pamela Leonard, Pamela Leonard, Pamela Leonard, Pamela Leonard, Pamela Leonard, Pamela Leonard, Pamela Leonard, Pamela Leonard, Alexis Battista, Alexis Battista, Alexis Battista, Alexis Battista, Alexis Battista, Alexis Battista, Alexis Battista, Alexis Battista, Alexis Battista, Alexis Battista, Simulation and Training Environment Lab, USA

In the ever changing environment of healthcare, where knowledge and errors is the difference between life and death, education and knowledge sharing plays a critical role. The Simulation and Training Environment Lab will share it's experience in creating a learning lab that blends web-based education with various simulation based training. SiTEL will show you how to incorporate all the information into a Learning Management System (LMS) that will package the education and create learner portfolios.Finally the participants will be immersed in the blended learning by participating in the program from start to finish.The participants will take a web-based education course that will consist of lectures as well as shell games. They will then proceed to simulation based training to include mannequin or device-based simulation. At the end of the session the participant will experience the immediate feedback of their performance of both the online training

as well as the simulation-based training. They will also see how their accomplishments are packaged and recorded in the LMS.

Read-X: Automatic Evaluation of Reading Difficulty of Web Text

Eleni Miltsakaki, Audrey Troutt, University of Pennsylvania, USA

We are developing a web-search application to locate and evaluate potential reading material on the internet. Our application, Read-X, performs a keyword search of the internet, analyzes the readability of text from each resulting website and classifies the text according to theme. This tool will be useful to adolescent and adult low-level reading students who face, among other challenges, a troubling lack of reading material for their age, interests and reading level.

Empirical investigation into Effectiveness of Corporate E-Learning Programs

Monika Mital, Renu Luthra, JAIPURIA INSTITUTE OF MANAGEMENT, India

Although the adoption of online learning programs by Indian organizations has been significant in recent years, the capabilities and efficacy of such programs have yet to be fully investigated. Most effort in this area has been devoted to program development while examinations of online program quality and effectiveness have been merely implied. The primary objective of this study is to evaluate e-learners' positive and negative perceptions of the key aspects of e-learning and to identify areas that need improvement. The following secondary objectives can be derived: What are the key drivers of e-learning; what perceptions do e-learners hold with regard to their e-learning experiences?

Rich Media Deserve Rich Feedback

Mathew Mitchell, Susan Prion, University of San Francisco, USA; Peter Brodsky, Cornell University, USA

This presentation addresses a common problem familiar to instructors who use, or are thinking of using, learner-generated multimedia assessments in their courses: how to efficiently provide timely constructive feedback to students. The basic problem is that there have not been efficient ways to provide substantive feedback to students regarding their multimedia products. Our presentation will first demonstrate the Annotation® software workflow when providing formative feedback to student-generated multimedia products. We'll then present initial student reactions to the value of this form of formative feedback across two different courses offered in the Spring 2007 semester. Reflecting on the both the instructor's experience and student reactions we'll provide suggestions for improving the feedback process in the future.

Substituting the chalk board with a tablet computer

Ananda Mitra, Wake Forest University, USA

This session will demonstrate the way in which tablet computing was integrated in the instruction of three under-graduate classes and one graduate class in a liberal arts setting. The computer was used as a substitute for the traditional chalk board used in instruction. This session will focus on the lessons learnt through the process throwing light on the benefits and burdens of using the tablet computer to act as a substitute of the chalk board.

Foreign language writing as a communicative modality in the technologically-enhanced educational setting

Daria Mizza, James Madison University, USA

This paper argues that writing as a communicative modality should play a more prominent role in foreign language instruction. Besides the importance of investigating how foreign language learners learn to write, there is also an emerging necessity of learning more about the instrumental role that writing skills can play in the acquisition and development of Foreign Languages in the communicative classroom. For this purpose, the paper investigates under what circumstances interactions with text, not exclusively synonymous with face-to-face spoken interaction, can play an instrumental role in the acquisition of a foreign language in pedagogically grounded and technologically enhanced educational setting. The investigation will be guided by the following research questions: 1) How can writing process instruction be most effectively integrated into the overall communicative life of foreign language classroom? 2) How do methods, techniques and contexts connect up with social context and activity also beyond the more traditional writing instruction?

Reflective Cycle for Instructional Design: Sustainable Improvement Model for Online Courses

Toshio Mochizuki, The University of Tokyo, Japan; Yoshiko Goda, Fumiaki Iwasaki, Takeshi Matsuda, Kinya Tamaki, Aoyama Gakuin University, Japan

This paper describes the evaluation cycle for online courses that are intended to achieve sustainable improvement. Aoyama Gakuin University has established an online course program and a course evaluation cycle to improve the courses. The initial evaluation cycle that focused on independent course evaluation was performed as part of the online program for two semesters. The examination of the improvement between the semesters revealed that the reflection of the instruction team as practitioners influenced actual improvements in the course. Finally, the paper describes the revised course evaluation cycle in order to reflect the practitioners' visions.

Mental Math vs. School Math: An Online Exploration of Preservice Teachers Individual and Collaborative Perceptions

Alireza Moghaddam, Faculty of Education, University of Western Ontario, Canada

This paper discusses the preservice teachers individual as well as collaborative perception and experiences of mental math. It describes how groups of preservice teachers attempted to do two basic computations mentally, and how they differentiate them from paper-and-pencil math. What they learned and felt in this learning experience has been described and its mathematical and pedagogical implications are touched upon.

Online Learning Interaction Continnum (OLIC): A Case Study

Mohamad Hisyam Mohd. Hashim, Universiti Tun Hussein Onn Malaysia (UTHM), Malaysia

This paper discusses the conceptual framework of Online Learning Interaction Continuum (OLIC) which explains the five levels of interaction. The OLIC was conceptualized as a result of a case study qualitative research conducted at Universiti

Tun Hussein Onn Malaysia (UTHM).The OLIC model consists of five levels of interaction beginning with level 1, the lowest level through level 5, the highest level. There are lecturer-interface interactions, lecturer-content interactions, lecturer-support interactions, learner-interface interactions and lecturer-context interactions. They state the challenges faced in interactions such as because of facilities, time, knowledge and skill and policies and procedures, participation, interest, online instructional strategies and content.

Using AJAX to Develop Courseware

James Monroe, State of California - Dept. of Transportation, USA

Online course developers face difficulties when combining various rich media and other elements into courseware such that editing and maintenance is easy. Asynchronous Javascript and XML (AJAX) is a coding technique that allows for the updating of only portions of a web page while leaving the remaining portions unchanged. By using AJAX, developers can architect sites that are easily edited and maintained at both the site level and page level without disrupting navigation schemes. AJAX is a combination of non-proprietary web technologies, specifically hypertext markup language, javascript, extensible markup language, and cascading style sheets. Use of special authoring tools is not required in order to develop AJAX web pages. Any media type supported by browsers (and whatever proprietary plug-ins the developer desires to use) can be incorporated into AJAX coded web pages. Examples and code samples presented.

SALMS: SCORM-compliant Adaptive LMS

Yasuhiko Morimoto, Fuji Tokoha University, Japan; Maomi Ueno, The University of Electro-Communications, Japan; Isao Kikukawa, Fuji Tokoha University, Japan; Setsuo Yokoyama, Youzou Miyadera, Tokyo Gakugei University, Japan

Most learning management systems (LMSs) simply manage the learning contents, the learning history data, the test results, and so on—they do not manage the learning itself. Therefore, the development of LMSs that enhance learning by effectively and efficiently managing the learning itself is needed. First, in this study, a SCORM-LST was developed by adding to SCORM (Sharable Content Object Reference Model) a framework that describes facilitation corresponding to the learner's state of learning and describes the learning state transitions. This makes it possible to describe collaborative learning, assessment, and facilitation for multiple users. Next, a SCORM-compliant LMS (SALMS: SCORM-compliant Adaptive LMS) based on the SCORM-LST was developed. SALMS interprets the SCORM-LST code and changes the user interface to match the learner's state of learning. Evaluation showed that SALMS can manage learning effectively and efficiently and can promote learners' autonomous learning by providing the learners with learning support.

Fostering Creativity in a Qualitative Research Course Using BlackBoard with a Blended Learning Approach: Best Practices.

Fernando Mortera-Gutiérrez, Tecnológico de Monterrey, ITESM-CCM, Mexico

Presenting a higher education case study from Mexico City on how to teach an undergraduate qualitative research course using online and e-learning technology (via BlackBoard) and face-to-face instruction, to foster creativity within the process of learning acquisition of qualitative research methodology tools (to gather and analyze qualitative data). A Blended Learning approach was used to delivery and to teach this course. The intention of this paper presentation is comment on the best teaching practices and strategies used to make meaningful the learning process of a highly complicated issues related to qualitative theories and paradigms (e.g., ethno-methodology, naturalistic inquiry, constructivism, and so on)- to undergraduate students at university level. "Blended Learning" is widely used nowadays in many higher education institutions; qualitative research courses do not escape from this trend, and they must be addressed in the best way to overcome the distance education technology interface and interaction problems.

A Sense of Urgency: Linking the Tom P. Stafford Air and Space Museum to the Science and Math Association of Rural Teacher's Community Of Practice (SMART-COP)

Warren Moseley, Brian Campbell, Matt Thompson, Jessica Mengers, Southwestern Oklahoma State University, USA

The Oklahoma State Department of Education through local public school districts sponsors a program called SMART: Science and Math Association of Rural Teachers. The funding comes from the "No Child Left Behind Act". The programs focus is to increase content knowledge, to expand the information technology readiness and to emphasize standards-based lessons for K-12 teachers in rural western Oklahoma. SMART supports a community of practice (COP) that supports that supports a repository dedicated to exchange of ideas. This repository has been expanding for several years now. The focus of this project is Space and its place in our history for accelerating science and math. The SMART-COP was enhanced by including information about space for K-12 teachers. The starting point for this expansion was the Tom P. Stafford Air and Space Museum in Weatherford, Oklahoma.

Linking the Tom P. Stafford Air and Space Museum to the Science and Math Association of Rural Teacher's Community Of Practice (SMART-COP)

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SMART-COP - Legitimate Peripheral Participation in the Science Math Association of Rural Teacher's Community of Practice

Warren Moseley, Brian Campbell, Matt Thomason, Jessica Mengers, Southwestern Oklahoma State University, USA

The evolving community of practice among rural K-12 teachers in Rural Oklahoma is experiencing a radical transformation from conventional ideas of Knowledge Sharing and Knowledge Discovery. In changing situations of knowledge acquisition and knowledge sharing the computational demands of these societies are changing as well. These new technologies are redefining what it means to be "literate" or "an educated citizen". Support for virtual communities of practice not been sufficiently responsive to the needs of the Rural K-12 teachers in Western Oklahoma. Computational Media is dramatically transforming the basic patterns of communication and knowledge interchange in society and this paper explores some of that transformation.

Am I Still Wiki? The Creeping Centralization of Academic Wikis

Andrew Moshirnia, E-Learning Design Lab, University of Kansas, USA

Communally published websites, or wikis, are often touted as a vehicle for introducing radical changes to the modern classroom. The open source model of wikis seems to promise a new pedagogy based on decentralized discovery learning and collaboration. However, the open source model of wikis is rarely preserved in the academy. Student concern for individual grades lowers the motivation for collaboration, and instructors require bureaucratic measures to ensure quality control. This paper frames this centralization of wikis by provided a case study of an academic wiki conducted over a six month period. Over the course of this time, student requests and teacher concerns transformed an open source wiki into a closed system with explicit formatting instructions, incentives, and mandatory assignments. While these changes may have created a more useful academic tool, they also contradict some of the basic characteristics of a wiki. Student perceptions of the wiki, as well as implications for future wiki use in classrooms, are also discussed.

Knowledge Management and Higher Education

Saleh Moshkenani, Sharif University of Technology, International Branch, Iran (Islamic Republic Of)

In recent years knowledge management (KM) has proved its significant role in the improvement of well known knowledge intensive industrial organizations and to enhance innovation. Universities and higher education (HE) institutes are highly knowledge intensive because of their input, their staff which is major knowledge source, their mission and their continuous educational and research processes, and also because of their output. But in spite of this fact, more or less, HE has a traditional official management. Knowledge management should have deeper role in the management of HE. Based on usual current architecture of higher educational institutes, and by using a number of examples, this paper tries to bring the knowledge management concepts and methods in different academic activities; at different organizational, as well as, personal levels. It also lists requirements and a practical plan to have a knowledge-management-based HE. On the other hand this paper shows that higher education in Iran should have more and sever role for education and research KM and knowledge engineering.

Evaluation of a blended tutoring program in conference interpreting.

Manuela Motta, ETI - Université de Genève, Switzerland

In 2001 the Interpreting Department of the Ecole de Traduction et d'Interprétation of the University of Geneva, established a tutoring program based on the pedagogical philosophy of "deliberate practice" in order to help students acquire the skills needed to become a competent professional interpreter. Indeed, interpretation is a highly cognitive and demanding activity and approximately 3-5000 hours of "deliberate practice" are needed for interpreters to be recognized as expert professionals. In 2004 a virtual learning environment was launched, and in 2005 a tutor-based e-component based on the same pedagogical philosophy was added to the face-to-face component. A first evaluation of the e-component took place in May 2005, and open feedback was obtained in May 2006 on the face-to-face component. A more thorough evaluation is under way and will conclude in May 2007 with, among other things, the establishment of best practices for teaching assistants, with a view to ensuring homogeneity in the application of the program's underlying pedagogical theory

HOT - an Automated Hiring, Orientation and Training System - a case study

Roger Mundell, Udutu Online Authoring Systems Inc., Canada; Gary Baker, Delek US Holdings Inc., USA

Delek Holdings is a rapidly expanding US Oil company with more than 500 retail gas & convenience store locations. In order to create and maintain higher standards of service in a competitive industry, the company challenged its Director of training to build an online media rich system that would streamline the hiring, training and orientation of new employees; work in all types of bandwidth; reduce employee turnover, and assist with regulatory compliance….and they wanted it in six months and at minimal cost. This presentation will tell how the training Director teamed up with a Canadian company to overcome the trials and tribulations of tying together multiple vendors and solutions, and will demonstrate the successful finished product.

Lessons Learned from Offering a Technologically Mediated Job-Embedded Professional Learning Program to Teachers

Janet Murphy, York University/York Region District School Board, Canada

Abstract: Since its creation in 2000 the Advanced Broadband Enabled Learning (ABEL) program has developed a blended learning service that enhances teacher and faculty professional practice and improves student achievement. Using award-winning methodology ABEL provides school districts and post secondary institutions with a collaborative platform, an instructional design approach for professional learning that uses information communications technologies (ICT), a proven implementation strategy and ongoing research and evaluation. While it continues to maintain its focus on transforming teacher and faculty practice through the use of broadband technology in schools, research into effective practices in delivering professional development and the impact of its implementation has led ABEL to centre attention more fully on

the impact of job-embedded learning. This paper focuses on ABEL's program strategy for teacher training and professional growth and presents the lessons learned from seven years of successful implementation.

Organisational Learning & ICT Integration Strategies in Higher Education Institutions.

Pearse Murphy, Athlone Institute of Technology, Ireland

The development of strategic thinking over the last century has evolved into a discourse into areas such as, organisational learning and systems thinking. In recent times we have witnessed the integration of information and communications technology (ICT) into teaching learning and assessment (TL&A), driven mainly by computing ubiquity and the rise of the internet. This paper briefly introduces the notion of whether there is merit in examining the level of diffusion and the success of the diffusion of ICT into TL&A against the establishment of traits which indicate engagement with the learning organisation philosophy as an approach to strategic focus. Thus can we correlate success of integration with demonstrable elements of organisational learning, relating to strategic initiatives, within higher education institutions.

Designing E-Learning Programs for Rural Social Transformation and Poverty Reduction

Copparapu S.H.N. Murthy, Amity School of Communication, Amity University, Noida UP, India

While the conventional education system with different forms of E-learning and rigid academic instructive curriculum could not bring desired changes in specified timeframe work at rural level in the targeted communities and groups, a multipronged sociological approach with a sociable and flexible curriculum in new E-Learning programs becomes need of hour. The impact of socializing influence of these E-Learning programs should be properly exploited to motivate and inspire the rural target groups. The benefits of E-learning then become extensive and soon integrate with the needs of the lower strata of the society in order for achieving a rapid social transformation in the lives of the farmers, vocational groups, artisans and small income self help groups comprising women, girls and physically challenged. The paper suggests a number of new generation E-Learning programs as strategies of development communication with a promise of high returns for the industry for its investment in these programs with socially relevant messages and media convergence.

Information Management Resource Kit (IMARK) - Improving information management in developing countries through e-learning.

Andrew Nadeau, Stephan Rudgard, Food and Agriculture Organization of the United Nations (FAO), Italy

The Food and Agriculture Organization of the United Nations initiated a partnership-based e-learning programme in 2001 to support information management professionals called the Information Management Resource Kit (IMARK). IMARK is targeted at information professionals in developing countries. Five curricula have been developed which introduce the latest concepts, approaches and tools for information management and exchange. Each IMARK curriculum is designed through a consultative process with subject matter experts, field practitioners and representatives from the target audience from around world. The modules are made freely available on the Internet, as well as on CD to ensure access to developing country learners subject to low-bandwidth and/or high connectivity costs. The intention is that all IMARK modules be produced in English, French, Spanish, Arabic and Chinese.

Exploring the Effect of Computer Mediated Communication Tools on Online Learners' Participation and Learning: A Review of Research

Hedieh Najafi, Sarah Ellis, Kelly Cox, Denise Calvert, OISE/UT, Canada

Constructivist approaches (Vygotsky, 1978) to online learning in higher education, emphasize the opportunities for collaborative work among online students. Although the number of online courses is dramatically increasing, the question of how synchronous and asynchronous Computer Mediated Communication (CMC) tools affect online students' learning and their willingness to contribute to collaborative and community building activities (Garrison, Anderson, & Archer, 2000) has not been rigorously answered. In this review of literature four major themes surfaced with regards to the effects of various CMC tools in the design and implementation process of online courses. Also, issues that call for further studies were identified.

S3HT Tutor – E-Learning States Space Search Heuristic Techniques for Problems Solving.

Mehdi Najjar, Department of Computer Science, Canada

This paper describes the first stage of a work in progress which aims to propose a knowledge representation approach that offer to build formal computational student models. The approach is inspired from the human memory subsystems involved in the cognitive activities during e-learning via virtual learning environments.

Open School Patforms Project

Masaki Nakagawa, Tokyo University of Agruculture and Technology, Japan; Rikiichi Koizumi, Shobi University, Japan; Akio Kido, Information-Technology Promotion Agency, Japan; Arimitsu Shikoda, Tohoku Gakuin University, Japan; Nobuko Kishi, Tsuda College, Japan; Yasushi Kuno, The University of Tsukuba, Japan; Eiichi Hayakawa, Takushoku University, Japan; Kenji Suzuki, Keiichi Yamanaka, Center for Educational Computing, Japan

Abstract: The Center for Educational Computing has been encouraging elementary and secondary education (K-12) to employ Open Source Software for IT and IT-empowered education in Japan. The basic idea is to exclude black boxes and open the learning environment, to liberate education from a particular system, to educate students in open collaborative atmosphere and to let students to experience multiple platforms with the expect that they learn what is intrinsic and what is technical. It has been revealed that the students have no difficulty to use OSS, the cost is reduced and the support can be enhanced within a fixed budget, the thin-client network architecture is favorable to decrease labor-intensive maintenance and it seems to protect students' privacy and keep security. On the other hand, the problems at the moment are fear or anxiety to weak support and a less amount of available software, hesitation of teachers to use OSS, little information on usable peripheral devices and premature business model.

Interactive Math Text with On-line Test for E-Learning

Yasuyuki Nakamura, Nagoya University, Japan

In a math class for students who major natural sciences, like physics, chemistry and so on, it is important to lead students to use mathematics in several problems of sciences. In order to realize that kind of education, it is necessary to teach a mathematical concept and to get students to solve problems. We developed some teaching materials by using mathematical software Maple. It is a first feature of the teaching material that text document and simulation software comes together. A second feature of them is that they offer some problems that are randomly generated at each trial. Furthermore they are accessible via web browser over the Internet with the aid of MapleNet; a server software for mathematical engine of Maple.

Reports on the Uses of Cellular Phones in Large Class Settings for Effective Instruction

Yaeko Nakanishi, Lumi Tatsuta, Satoshi Wada, Dokkyo University, Japan

This research presents the results of studies on the utilization of cellular phones to improve academic instruction in a large class setting. The studies have indicated that it is not satisfactory to simply install a "question box" and to carry out "in-class surveys." What is important is the instructors' resourcefulness both in the way of presenting lecture content and in carrying out class activities. We also have developed a new electronic system that enables students to download PowerPoint files directly into their cellular phones. We anticipate that it will contribute to the increase of bi-directional communication between instructor and students. In the spring term of 2007, we explored the possibility of using cellular phones as tools for evaluating the educational effectiveness, in four different subject classes. In all four classes, the collection rate of "class evaluation" was high enough to prove that the cellular phones can be a powerful tool for achieving effective instruction.

Utilization of Information and Communication Technology in Clinical Practice of Public Health Nursing

Hisae Nakatani, Sachiko Hirono, Keiko Muramatu, Hiromi Uchida, Yuta Kobayashi, School of Nursing, Faculty of Medicine, Shimane University, Japan

The purpose of the study was to examine the effective use of Information and Communication Technology (ICT) by nursing students in clinical practice of Public Health Nursing (PHN) in Shimane University. We conducted a questionnaire survey in 71 senior nursing students after the completion of the clinical practice of PHN and collected from 66 students (92.3%). Of the nursing students, 76% had personal computers (PC). The internet was used daily for study in 65.2%. The internet was used for clinical practice in 84.8% which was higher than the daily use. Although 42.4% of the students needed to exchange information with the faculty, 54% of such students could actually communicate with the faculty by e-mail. For the clinical practice of PHN in out-of-campus community, the internet use was higher by 25.7 points than that of everyday learning. The results suggest a need for Computer Assisted Instruction (CAI) and development of the e-learning system by improving ICT environment.

Everyone Wins! The Impact of Moving to a Blended Training Model

Don Nance, Wichita State University, USA

This best practices presentation reports the results of moving from a reliance on face to face training to a blended model of asynchronous online courses and a reduced amount of face to face training. The training was developed and delivered to community-based providers of mental health services working in 28 community centers across the state of Kansas, USA. The event training delivery system requires travel, scheduling and coverage. The online training delivery system allowed new employees to begin training immediately, receive feedback on their learning and allowed supervisors to monitor progress. The results show the blended model was superior for accessibility, content mastery, elapsed time to completion of training requirements, and cost saving. The benefits to everyone - to the trainee, to the organization, to the clients being served, to the State regulators and to the University are identified. The implementation strategies that added to the success of the blended model are discussed.

Driving Competitive Intelligence in the Virtual University

Alireza Nasiri, University of Tehran, Iran (Islamic Republic Of); Guishi Deng, Dalian university of technology, China

The increasing development of IT, has exerted extensive changes in e-learning. Although e-learning is a new method, universities' efforts are directed toward presenting a pattern for the educational structure in the field of e-learning. Therefore, we need to know its different faces, how to manage it in a competitive environment so that it works efficiently, but there is still a lack of experience in organizing and managing the virtual universities for the best service. In this paper, the effort is made to present a suggestion for organizational characteristics, which could run a virtual university for effective competition. Experiments of e-learning centers throughout are examined from. As are previous studies that relied on organizational theories, available and field information. In this research, characteristics of the highly competitive virtual university were Searched and those tasks. These characteristics were extracted and after classifying the types of duties, those jobs that can do duties were determined

Online Communities: Innovative Notions of Expertise and Peer Learning

Lisa Neal, eLearn Magazine, USA, USA

Online communities are changing the definition of expertise and hence the very nature of peer learning and support. Does a sense of exhibitionism impact how expertise is viewed and rewarded? Is there a difference between experts and self-proclaimed experts in online communities?

Online communities and social networking have become popular for virtually all business and personal interests and needs. This trend has increased the expectation for and reliance on peer learning and support to supplement or replace that of traditional experts. In many cases, people do not use the best judgment when relying on online communities, but the consequences of poor information depends on what the information is and how it is used. Peer reviews and ratings in an online bookseller at worst leads to a poor purchasing decision with the option for a return. Medical information can have graver consequences when poor advice

is taken or is erroneously applied, or when professional treatment is not sought. This talk explores three types of online communities, general social networking, online learning communities, and online health communities, examining how and why people participate in and use them and what are the supporting technologies.
Online health communities are a particularly interesting example of online communities, providing a means for patients and their families to learn about an illness, seek and offer support, and connect with others in similar circumstances. Online health communities raise difficult design challenges because of the wide variability of members' medical expertise, need for education and support about a disease or condition, health literacy, and technology literacy, and the potential severity of problems due to misinformation. The importance of online health communities, like other types of online communities, is evidenced by their popularity, as well as the significant impact they have on the quality of life of their members.
This talk will examine the different types of online communities and the ensuing notions of expertise; lessons learned from successes in a number of domains including healthcare; and how innovative Web 2.0 technologies are being used to enhance people's ability to participate in online communities.

E-Learning Classifications: Formats for online course delivery

Solomon Negash, Kennesaw State University, USA

With the plethora of technologies and e-Learning options, there is a need to understand the effectiveness of e-Learning environments; this however is not possible unless we first understand the similarities and differences among online course delivery formats. For example, an online class where the learner is provided with a website to download lecture notes is different from one where the student has interactive communication with the instructor. The later is also different from an online class that provides the learner with live audio and video. This paper defines six e-Learning classifications to better evaluate the effectiveness of online course delivery. Understanding the similarities and differences of the e-Learning classifications lays the ground work for developing effectiveness measures instead of assuming that all online course delivery formats as being the same.

From Semantic Document Annotation to Global Search Facilities for Personalized Study Programmes

German Nemirovskij, Peter Bugiel, Albstadt-Sigmaringen University, Germany; Eberhard Heuel, FernUniversität in Hagen, Germany

The vision of a common international education space, including universities, infrastructure, and services raised in the last decade. It implicates the composition of personalised study curricula consisting of modules offered by different universities and colleges .In this scenario there is a strong need for efficient services enabling individual search and comparison of study programmes and modules. The SWAPS (Semantic Web Approach for Personalisation of Study) project, presented in this paper, is focussed on the development of a dedicated search system, based on Semantic Web technologies. The SWAPS system facilitates automated semantic annotation of programme and module descriptions available on the web. The extracted semantics are stored in machine readable form offering a realistic perspective for efficient processing of semantic search and comparison of programme and module descriptions. This is an important step towards creating a global search and brokerage system for personalised study programmes.

Generation of Eexercise Objects for Personalised Technology-Enhanced Music Learning

Kerstin Neubarth, City University, UK; Atta Badii, University of Reading, UK; Tillman Weyde, City University, UK

The generation and variation of exercise structures as well as exercise content using pedagogic concepts is as yet a relatively rarely targeted research topic; current research in personalisation of technology-based learning rather focuses on content selection and learning sequence adaptation based on user profiles. As part of the i-Maestro project we are developing a Music Exercise Generation Tool within an interactive multimedia environment for technology-enhanced music theory and practice training. The tool generates customised music exercises in a semi-automatic and context-sensitive manner by creating and modifying the exercise content and structure, based on a representation of knowledge about the domain and its pedagogy.

An E-learning Comparative Alignment Framework

Diane Newton, Allan Ellis, Southern Cross University, Australia

Researching the factors influencing e-learning effectiveness is a complex and contentious task due to the dynamic, complex and interrelated factors in education and training environments. A recent major study of the Australian Army's use of e-learning courses approached the understanding of e-learning effectiveness factors by aligning multiple perspectives across e-learning activities. A model was proposed that highlights that e-learning effectiveness was framed primarily in terms of the alignment of the e-learning culture with the organisational culture. This paper presents the development of an E-learning Comparative Alignment Framework (ECAF) based on this model. This framework provides a scaffold and a comparative analysis approach for understanding e-learning effectiveness factors from multiple perspectives across an organisation. The practical and theoretical implications of the ECAF are discussed.

Using E-Learning to Improve I.T. Security Culture in a Corporate Environment: A Case Study

Leanne Ngo, Wanlei Zhou, Matt Warren, Elicia Lanham, Deakin University, Australia

This paper presents a case study, which was conducted to explore the use of an e-Learning technology – Moodle, a popular open-source course management system – to aid with the improvement of I.T. security culture and awareness within corporations. Advances in technology are providing new and innovative ways to provide training and human resources development. Our Moodle system, called Improved Security Culture and Awareness (ISeCurA) is based on our Information Security Culture Transition Model (Ngo, Zhou and Warren 2005). The model emphasizes the importance of understanding the transition towards information security culture improvement. An explanation of the design and development ISeCurA are presented, as well as how ISeCurA was implemented into the corporation used in the case study. A discussion of the

findings suggests that the use of ISeCurA within a corporate environment helped the corporation and their members' transition towards an improved I.T. security culture within an efficient time scale.

Adopting Tablet PCs in Design Education: Student Use of Tablet PCs and Lessons Learned

Hien Nguyen, Sven Bilen, Richard Devon, John Wise, The Pennsylvania State University, USA

This paper explores the issue of Tablet PC (TPC) adoption in student design teams. There are many advantages of using TPCs in education, with many positive results reported. TPCs have features such as digital ink, portability, as well as collaborative functionality. With these features, TPCs should be a great fit for design education and practice. However, adopting such new technologies can come with many issues, such as the lack of training for students, implementation difficulties, and integration into the curriculum. We describe student use of TPCs in engineering design classrooms, students' opinions of TPC use and the issues that can be found in the adoption process, overview the lessons learned from our adoption trial, and suggest a framework for facilitating the adoption of new technology in engineering design education. Through our lessons learned we hope to improve the adoption of TPCs in the future. Data sources include surveys, student reflective essays, and focus groups.

The Effects of Planning on Different Affective and Outcome Measures in Cross Cultural Collaborative Problem Solving

Hien Nguyen, Barbara Grabowski, The Pennsylvania State University, USA

Cross-cultural collaboration without sufficient planning can lead to frustrations and failures. This study examines the effects of systematic planning in scaffolding undergraduate students' cross-cultural collaborative processes. The study employs a single-group, repeated-measures experimental design, where multiple measures are collected at different times. Two groups of undergraduate students are investigated: one group is from a major university in the northeastern United States and one group is from a university in Hungary. They work together in cross-cultural teams of six to eight students on a semester long project. The study also looks at the influence of prior-cultural experience on these results. It is hypothesized that high level of planning through instruction on planning will improve the students' attitude toward their team members, increase their motivation and self-efficacy toward cross-cultural collaboration, their satisfaction and their group performance.

Using Web 2.0 Tools to Design Collaborative Learning Environments

Mary Nicholson, Bloomsburg University, USA

What are effective techniques and strategies for incorporating these Web 2.0 tools into our online classes? How do we facilitate collaborative projects? How do we guide our students as they work with these tools? What types of projects can be incorporated into synchronous learning environments? In this Best Practices session we will present real examples of how teachers and students at Bloomsburg University in Pennsylvania use these Web 2.0 tools to create wonderfully dynamic collaborative projects. We will share our "tried and true" techniques for setting up collaborative teams, interacting in virtual worlds like Second Life, establishing professional blogs, and building collaborative eBooks with a wiki. We will include the time management and communication protocols we have designed, the customized learning environments we have created, and the most effective teaching strategies that work in this Web 2.0 world. Real examples, case studies, and links to our web sites will be included in this presentation.

Interaction and self-presentation online: An analysis of blogs, virtual communities and places of serendipitous interaction

Stefan Nilsson, Lars Svensson, University West, Sweden

In this paper we analyze blogs, virtual communities and places of serendipitous interaction as tools for interaction and self-presentation. The purpose of the paper is to further the understanding of these interaction concepts as social tools and to provide an aid for developers of systems incorporating interaction such as e-learning systems. We find that the three interaction concepts provides for very dissimilar modes of interaction and support for impression management and as developers of social systems it is critical to understand these modes and how they can be used.

Ontology Mapping based on Similarity Measure and Fuzzy Logic

Suphakit Niwattanakul, L3i, University of La Rochelle, France; Philippe Martin, Griffith University, Australia; Michel Eboueya, L3i, University of La Rochelle, France; Kanit Khaimook, Suranaree University of Technology, Thailand

In this paper, we present a method of an ontology mapping based on a similarity measure and Fuzzy logic in order to classify (i) the similarity of the ontology structure of learning object repositories and (ii) LOR which stores metadata of learning objects based on our ontology model. In this model, values of the ontology similarity are computed for concepts, properties, and relations. The ontology similarity uses parameters based on the Fuzzy Control Language (FCL) which consists of a fuzzy set of the ontology similarity ("Less", "Same", "More"), 7 classes of ontology similarity, and rules of the classification of ontologies. The formula of similarity measure by the Jaccard's coefficient is applied to map a similarity of ontology structures. At the end of the article, we show an experience of implementation this model as a prototype.

Managing Tutor and Student Affects in an Intelligent Tutoring System

Roger Nkambou, University of Quebec at Montreal, Canada; Michel Eboueya, Université de la Rochelle, France

This paper presents AITS, an architecture for Affective Intelligent Tutoring Systems (ITS). In order to promote a more dynamic and flexible communication between the learner and the system, we integrate two adaptive emotional agents in a multi-agent AITS. The first component allows the tutor to express emotions in response to the student's actions. The second component makes it possible the capture of student affects during learning and efficiently adapts content planning, learning/tutoring strategies and tutoring dialogues based on affective and cognitive data.

TEACHING PRESENCE THROUGH ONLINE DISCOURSE: The PERSPECTIVE Of INSTRUCTIONAL DECISIONS And JUSTIFICATIONS

Bessie Nkonge, Japhet Nkonge, North Carolina A&T State University, USA; Bosede Aworuwa, Texas A&M University, USA

The aim of this discussion is to report how instructors manage classroom discourse following a shift in teaching and learning in a higher education institution as a result of the introduction of online teaching. The report is centered around the theoretical concept on teaching presence (Anderson, Rourke, Garrison & Archer, 2001), and Chickering and Ehrmann's Seven Principles (1996). The latter offer sound guidelines for conducting online courses such as "encouraging contact between students and instructors", "giving prompt feedback" and "communicating high expectations". Instructors often exhibit unique strategies and tactics for establishing teaching presence, breaking down the walls of isolation and providing an engaging infrastructure for learning. This discussion includes findings of a qualitative study in which teaching presence was investigated.

An Exploratory Study of Affordances of CLEA Interface in Astronomy Laboratory Simulation

Piyanan Nuankhieo, Lanika Ruzhitskaya, University of Missouri-Columbia, USA

This study investigates the interface of an astronomy laboratory simulation, called CLEA, in undergraduate class from affordance perspective. This paper examines how users' computer attitudes affect perceived cognitive affordance of the simulation and to what extend the CLEA module utilizes cognitive affordance that enable novices to efficiently perform a required laboratory task. The finings shows insignificant differences in level of cognitive affordance among gender, computer experience, and computer attitude which may imply that CLEA can be used by all types of users regardless of gender, computer attitude, and computer proficiency. In additions, CLEA demonstrates to have sufficient cognitive affordance which enables novices to perform a required laboratory task.

Hybrids of Learning and Assessment: The Next Generation of Electronic Portfolios

Barbara OByrne, Marshall University Graduate College, USA

This paper reports on a study in progress on the construction of an e-portfolio in a graduate literacy education program. It investigates the assumptions and goals of e-portfolio centered on learning rather than assessment. A shift in conceptual emphasis from assessment to learning influenced the sequencing and construction of portfolio tasks, and enlarged student engagement and ownership of learning. Analysis of samples of candidates' responses to the portfolio tasks demonstrated the emergence of a reflective and transformational discourse, an identifying feature of a learning portfolio.

Using Reality-Based, Authentic Streamed-Videos and Online Conversations to Prepare Pre-Service Teachers for Urban Classrooms: A Pilot Study

Eileen Oconnor, Empire State College / SUNY, USA

Abstract: Within this alternative teacher-education program, pre-service teachers prepare for high-needs environments without the customary student-teaching apprenticeship; these students must experience best practices and should develop a peer support network. As a pilot within a blended course, authentic experiences were provided by streaming short segments of an urban-student workshop. Prompting, open-ended questions were posed, seeking honest analysis and commentary. The rich insightfulness of these students' comments suggests this approach may encourage better future practice; the camaraderie evident in the peer interactions suggests community building, a hopeful boon to later retention. Since this clinically-designed, teacher education program will continue to work with these students for two years in their own classrooms, the merits of incorporating authentic videos and reality-based conversations into pre-service courses can be further evaluated in classroom practice.

Japanese101.com

Yukari Oda, University Laboratory School, USA

Learning a foreign language can enrich early childhood education. Japanese101.com is an appealing and convenient way to learn and teach the Japanese Language. The website serves children from preschool through elementary school and the adults who care for them. We match our Japanese learning videos to the needs of children at each developmental stage of their childhood with special content to help adults make the most of every learning opportunity.

Welcome to the Era of the Free Range Learner: How Web 2.0 and the 3D Internet are Changing the Game in Learning

Tony O'Driscoll, North Carolina State University, USA

Just as Web 1.0 technologies ushered in the era of e-learning, the onslaught of Web 2.0 and the 3D internet present a huge opportunity to literally change the game in learning. Tony's address will introduce us to the new generation of people and technologies for the new millennium. He will describe how the changes in store for us provide an unprecedented opportunity to achieve breakthroughs in collaborative and experiential learning. He will describe the emerging sensibilities of these new technologies and discuss how they will provide educators and instructional designers with more degrees of freedom as they design and deliver learning experiences. Most importantly, Tony will challenge us to rethink our role as learning professionals by showing us the possibilities within our reach.

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design and deliver learning experiences. Most importantly, Tony will challenge us to rethink our role as learning professionals by showing us the possibilities within our reach.

Blended instructional practices in higher education institutions

Eunjoo Oh, Suhong Park, Pusan National University, Korea (South)

The purpose of this study was to investigate current practices in blended instruction. In particular, the study explored (1) the types of instructional delivery methods, technologies, and instructional components that are currently being employed, (2) the reasons why faculty apply blend instruction, (3) the degree to which blended instruction is being adopted in higher education institutions, and (4) the advantages and challenges in delivering blended instruction. This study focused on the practices in the Universities that have the extensive doctoral research programs classified by the Carnegie Foundations. The survey was performed with the sample of faculty and IHE representatives from the 151 universities. The survey data included 34 staff from 33 universities and 133 faculty from 30 out of the total 151 universities.

How are universities involved in blended instruction?

Eunjoo Oh, Jungsub Kim, Pusan National University, Korea (South)

Every year, the number of universities adopting the blended instructional delivery method keeps increasing and receives positive feedbacks from students and instructors about learning outcomes and teaching practices. However, there are still problems related to developing online instructional components and instructional support and these often become challenges for faculty, institutions, and instruction. This study explored such issues by examining (1) how instructors are involved in delivering blended instruction, (2) how they perceive the instructional method, (3) how institutions support faculty for developing online instructional materials and evaluating blended courses. A survey was conducted with 1000 instructors at 151 universities that were classified as doctoral research universities by the Carnegie Foundations.

A deeper look into an online MBA program: Do students really learn what they need in business?

Maggie Ohara, John Anderson, East Carolina University, USA

Managing a Center for Online Testing: Challenges and Successes

Maggie Ohara, Robin Armstrong, East Carolina University, USA

This presentation will demonstrate how the College of Business (CoB) at a major public university in the southeast United States (Southeast U) manages its proctoring center. Challenges discussed will include: dealing with procrastinators – both students and faculty; operating above capacity; managing during midterm and finals week, and maintaining academic integrity. A detailed look at the processes we employ will also be included. Solutions and specific examples will be presented and discussions on how to organize a testing center will be encouraged.

Developing Positive Attitude Toward Technology-based Instruction

Mabel CPO Okojie, Mississippi State University, Nigeria; James Boulder, Mississip[pi State University, UK; Tinukwa C. Okojie-Boulder, Mississippi State University, UK; Chien Yu, Miss, Taiwan

This paper examines various ways of helping teachers to develop positive attitude toward the use of technology to facilitate instruction. Developing positive attitude will help teachers gain the spontaneity and the readiness necessary for technology integration. Having positive attitude represents one way of overcoming computer intimidation. The concept of technology integration is examined from a broad perspective in an effort to show that technology in education should be considered as part of pedagogy. The paper considers the significance of teachers' collaboration with businesses and industries in selecting various technological resources for instruction. A technology-based learning environment is seen as complex, and as such, teachers need support system in implementing technology integration. Our dependence on technology for survival has made it imperative for teachers to learn to develop positive attitude towards the use of technology for classroom instruction.

Production of Broadband Educational Content: Presentation of the PLOW Project.

Lia Raquel Oliveira, Ana Amélia Carvalho, Leonel Santos, Luis Amaral, University of Minho, Portugal

The project Production of Learning Objects for the Web (PLOW) is based on an advanced use of ICT's, and aims at creating educational content in a "learning object" format. This content will be available over the Web (Internet) in an open access repository. The text presents the project (learning object concept, target audience, actions and objectives, content to produce, team and expected results).

Composites and Advanced Materials Curriculum Mediation with STAR.Legacy E-Learning Mosaics

Timothy O'Mahony, University of Washington, USA

This paper introduces an archetypical learning intervention that investigates continued learning in the evolving aerospace workplace. Situated within the conceptual framework of 'adaptive expertise', it is argued that this archetypical pedagogy prepares engineers for future learning [1-7]. In the study, sixty-three engineers were randomly assigned to one of two teaching archetypes (lecture vs. legacy). Various instruments were administered, including a demographic questionnaire, an affective survey, and pre- and post-tests. In addition, video/audio data was captured. Both quantitative and qualitative methods were used to analyze the data. Findings confirmed the researchers' hypotheses; incumbent engineers indicated that (i) the interactive problem-based instruction methodology was far superior; (ii) they were more engaged during problem-based methodologies—they interacted more with each other and with teachers and subject matter experts (SMEs); and (iii) they learned with understanding during the challenge-based methodology. Future research is recommended.

"Self Actualization" of the online instructor: University faculty's perceived barriers to effective online instruction

Jody Oomen-Early, Lynda Murphy, Texas Woman's University, USA

What inhibits effective online instruction? What are the fundamental components of achieving "self actualization" within the virtual classroom? This session will highlight the results of a qualitative study in which university and college faculty who subscribed to distance education listservs were asked to list and rank their perceived barriers to effective online instruction. Those that participated in this open-ended survey (n=101) identified a number of administrative, technological, and pedagogical barriers that impede upon their perceived success in the online courseroom. This research presentation will review the common themes that emerged and provide suggestions and strategies for administrators, faculty, faculty trainers, technology support staff and instructional designers to improve upon E-learning outcomes.

Bridging the virtual divide: Using aysnchrounous audio communication (AAC) to provide instructor feedback in the virtual classroom

Jody Oomen-Early, Texas Woman's University, USA; Tara Gallien, Northwestern State University of Louisiana, USA

Instructor to student feedback in the online classroom is commonly identified as one of the key issues in increasing students' satisfaction, retention, and academic performance online. Asynchronous audio communication (AAC) is emerging as a instructional strategy to build community and enhance the learning experiences in the virtual classroom. This Best Practices session will review the advantages and disadvantages of using AAC as a feedback strategy, review findings from case studies which implemented AAC feedback strategies, and provide a "how to" for instructors on how to use and implement AAC within the online courseroom.

Authentic learning and multimedia in work-integrated e-learning

Christian Ostlund, Lars Svensson, University West, Sweden

This paper reports from a design process within an e-learning project. An e-learning web lecture on how to search the World Wide Web was created based on narrated screen captures and power point slides. A framework grounded in situated learning was used to create the multimedia instruction for the web lecture. Flexibility vs. Collaboration, Multimedia Instruction vs. Multimedia Interaction and Situated Content vs. Situated Use headlines the discussion on challenges where theory and practice deliver conflicting implications for system design.

Work in Progress: The Intercultural E-Portfolio. Enhancing Teachers' Professional Development and Personal Growth

Laila Oubenaissa-Giardina, CIRTA, LICEF, Canada; France Lacourse, Helen Hensler, University of Sherbrooke, Faculty of Education, Department of Pedagogy, Canada

The Intercultural eportfolio provides a cognitive learning environment for pre-service teachers to express their cultural scripts, beliefs on knowledge and practice, and to articulate personal experiences in verbal and non-verbal modes. It attempts to create a supportive context, which may guide and direct the monitoring process and reflective awareness on the way pre-service and in-service teachers acquired attitudes, knowledge and skills during their progress through teacher education programs. The theoretical foundations underlying the intercultural eportfolio design are articulated around three elements: reflection as an interactive dynamic between experience and meaning-making, competency as an interactive tool linked to its context of use, practice and master, and professional development as a sequence and networks of change. This paper presents the theoretical and conceptual foundations that underline our design approach of the prototype of the intercultural eportfolio, which is designed to support educators in their scaffolding process.

A Trial Evaluation of Career Education Supported by Mentors on the Internet

Shigeto Ozawa, Oita University, Japan; Shougo Kato, Waseda University, Japan; Shoji Nishimura, Waseda Universityjj, Japan

I carried out a career education for junior high school students to bring up their interests for various occupations. To realize this purpose, I introduced mentors who have occupational career and give the students advices related to their job. This practice was conducted in collaboration with a junior high school and a university, and an internet bulletin board system was provided for the students and mentors to facilitate communication between them. In this research, I examined some evaluations of the practice as a career education. At the same time, I analyzed the contents of the questions which were asked by the students. As a result of quantitative and qualitative examination, I found that this practice received positive evaluation. In addition, I found that the students focused on a mentor's professional experience, an emotion matter and a course. Especially, I suggest that the emotion matter is important indicator to inquire students' carrier view.

Open social software applications and their impact on distance education

Betul Ozkan, Long Island University, USA; Barbara McKenzie, University of West Georgia, USA

Social software is defined as a tool that "enables people to rendezvous, connect or collaborate through computer-mediated communication" whereas open source software is "software whose source code is available under a license (or arrangement such as the public domain) that permits users to study, change, and improve the software, and to redistribute it in modified or unmodified form" (Wikipedia, 2007). This presentation is survey of three open source social software programs Elgg, del.icio.us, IHMC CMap Tools, and their possible uses in distance education programs. The authors will discuss features of these programs, their uses, strengths and weaknesses as well as demonstrate some of the examples in that use open social software. The authors believe that discussion and elaboration of the experience on such applications will benefit others who are considering using these programs in their own practices.

Grammatical Choices for Re-organizing Messages

Ayse Ozverir, Eastern Mediterranean University, Cyprus

The design issues behind online material design are a very crucial point. It is crucial to the extend that one must find an appropriate pedagogical approach to exploit the Internet to its advantage. Such an approach is the Genre Approach. The genre-based approach being "the study of whole texts in context" (see Halliday in Halliday and Hasan, 1985, p.10, cited in Feez, 2001, p.213), it provides the opportunity to "explore register variation in language" (Feez, 2001, p.214). Thus, learners

are able to develop study skills such as academic writing and in turn develop their "academic communicative competence" (Swales, 2000, p.6). Moreover, the online environment seems to lend itself to context communicative teaching as "writing processes become more collaborative and purposeful as students engage in project-oriented research and writing for a real audience"(Tella 1992b; Barsen et al, 1993; Warschauer 1999; Meskill and Krassimira 2000; cited in Warschauer, 2001, p.210) by having their work published on the internet.

Coming to Existence: Economic Models for Sustainable Learning Objects Repositories.

Mariya Pachman, William Bramble, University of New Mexico, USA

This brief paper presents a new way of approaching Learning Objects (LO) economics. LO repositories are widely discussed in research forums between technical professionals, instructional designers and educational administrators as a new cost-effective way of delivering instructional content to the learners. While the reusability of learning objects, metadata, and context issues has received a good deal of attention in the educational community, the economics of LO is often assumed "to emerge" by itself. How can a sustainable LO repository be created? To answer this question we discuss factors affecting the costs of LO repositories. We look at existing distance education cost models and their impact on LO economics. We present different ways to address fixed and variable costs of a repository with particular attention to the economy of scale and development of the objects themselves. We conclude by providing practical recommendations for starting and sustaining LO repositories at different levels (from a single institution to international collaborations).

Improving Animation Tutorials by Integrating Simulation, Assessment, and Feedback to Promote Active Learning

Ornella Pagliano, William Brown, Gordon Rule, Carnegie Mellon, USA; Diana Bajzek, Carnegie Mellon University, USA

A multidisciplinary team of biologists, media programmers and educators have been constructing detailed animated tutorials describing complex biological processes to facilitate students' understanding in the Modern Biology and Biochemistry courses at CMU. This paper describes the evolution of these tutorials into active learning environments. We have integrated feedback techniques relying on mathematical models within simulations to provide problem-based learning interactions and promote a deeper understanding. Furthermore, we have integrated self-assessments within the tutorials, so the students will be able to test their knowledge by interacting with animations, answering questions, and receiving multiple levels of feedback. These environments provide a continuous flow of student interaction and performance data. We plan to include this data into our Digital Dashboard for Learning, a dynamic portal providing an overview of the students' performance, to improve teaching and learning.

Action Planning: An Effective Tool for Leading and Assessing School Wide Change Efforts

Deniz Palak, New York Institute of Technology, USA

Action planning is fundamental for successful program implementation and evaluation. The process of writing clear, realistic plans that outline the vision and mission of a school wide change effort is a challenging endeavor. School change efforts are likely to suffer when action planning fails to provide good strategies toward reaching program objectives, identify the roles and responsibilities of major stakeholders, and determine the indicators of assessing successful implementation. This study describes the method, process, and outcomes of the iterative process employed in conducting document analyses on the 149 Explorer Schools action plans. The purpose of disseminating this study is twofold: (1) to inform those who plan to measure effectiveness of a new educational program through assessing school action plans and (2) to guide those who plan to lead an educational change initiative through action planning

Testing the Satisfaction Aspect of a Web Application to Increase Its Usability for Users with Impaired Vision

Romel Palis, Anthony R. Davidson, Omar Alvarez-Pousa, New York University, USA

The purpose of this study is to analyze the effects on the user interface satisfaction aspect of a web application that affects its usability results when tested by different groups with varying number of visually impaired users. The study used Questionnaire for User Interaction Satisfaction (QUIS), a tool to assess the users' subjective satisfaction with specific aspects of the human-computer interface on computer-based systems. Through remote usability testing, the satisfaction measures data collected from randomly sorted study participants to form six groups. A post-hoc test used an analysis of variance (ANOVA) and a Games-Howell test to determine where the significant differences occurred. The test group having six subjects had the highest satisfaction levels while the group with three had the lowest.

Ingredients of Educational Portals as Infrastructures for Informal Learning Activities

Stefanie Panke, Knowledge Media Research Center, Germany

Open Educational Resources (OER) play a growing role in formal and informal learning settings – in the form of software, open courseware, open access publications and e-journals or information resources of the Internet. This paper focuses specifically on the design of portals, which compile information on a specific topic and, thereby, offer a focal point for informal learning activities. These resources have implicit or explicit educational goals: They aim to give comprehensive information on their topic and they usually support knowledge exchange in a community. This paper provides an overview of typical components constituting educational portals. Basic elements are identified in an explorative website analysis survey.

Distance Learning: The New Melting Pot

Paige Paquette, April Parker, Troy University, USA

As distance learning continues to burgeon its way into the field of education, it is imperative that instructors recognize the various students that it invites. Students from all nationalities, age groups, genders and occupations are now able to receive an education. These students are part of the new melting pot.

Extreme Makeover Online Classroom Edition: Building Communities in the Online Classroom

Paige Paquette, Troy University, USA

Is it time for an Extreme Makeover in your online classroom? As online learning courses continue to become more common in the educational world, a need to build a community among the participants is more apparent. This presentation will define online learning communities, discuss advantages of creating and encouraging online learning communities in the virtual classroom, and also provide best practices instructors may use in order to build this environment in his or her online learning classroom.

Graduate Education Students' Perceptions of Podcasting as Teachers and Learners

Prachi Parashar Panday, University of Regina, Canada; Mark J.W. Lee, Charles Sturt University, Australia

This paper describes learning. A group of students undertaking an online, graduate-level educational technology course were given the opportunity to experience podcasting in two roles: firstly, as learners listening to podcast-based instructional material for their course, and secondly, as teachers responsible for developing and distributing podcasts within their own professional contexts. Web-based surveys and reflective writing assignments were the primary methods used to elicit the views and experiences of these students from the different perspectives. Preliminary data and findings will be included in the proceedings version of the paper, with a comprehensive analysis of the results to be presented at the conference.

Gathering Momentum: Evaluation of a Mobile Learning Initiative

Maeve Paris, University of Ulster, UK

The Wireless Campus strand of the Northern Ireland Broadband Flagship Project sought to create a wireless-enabled teaching and learning environment for students and lecturers on the Magee campus of the University of Ulster. This was achieved through the provision of three key elements: wireless campus and networking services, the Tablet PC mandate, and the development of smart classroom environments. A consideration of the project and its implementation is presented, along with recommendations for future initiatives to encourage the deployment of mobile learning in higher education

Differences in personal characteristics, family and organizational supports, and learner satisfaction between dropouts and persistent learners of online program

Ji-Hye Park, Kookmin University, Korea (South); Hee Jun Choi, Hong-ik University, Korea (South)

High dropout rate in online learning has been of concern to many higher education institutions and organizations. This study aimed to determine whether persistent learners and dropouts are different in individual characteristics, family and organization support, and learner satisfaction with the course. Data were collected from 48 learners who had dropped out of or finished online courses offered from a large midwestern university. Dropouts and persistent learners showed differences in perceptions of family/organizational support and learner satisfaction. In addition, the model including educational level, family support, organizational support, and satisfaction was able to sufficiently predict learners' decision to drop out of online courses. The results imply that lower dropout rate can be achieved if online program developers or instructors consider learners' educational level and find ways to enhance learner satisfaction and if they are supported by their organizations.

Development of the 21st century e-learning Training Model

SunJu Park, Gwangju National University of Education, Korea (South); JeonEun Oh, WeolGok Elementary School, Korea (South); JiEun Park, GeumGu Elementary School, Korea (South)

As e-learning as a device for easy and convenient self-leading learning has been paid more attention to, the necessity of e-learning teachers with effective e-learning know-how has been expanded. In order to develop a curriculum to train e-learning teachers, this study analysed programs of domestic e-learning training centers and ICT training programs of 16 city and provincial education offices, and based on opinions of teachers and examination by experts, developed training programs for e-learning teachers. And based on the training programs for e-learning teachers, it analysed curriculum on computers from 11 National University of Education and presented e-learning curriculum for would-be teachers.

Emerging Technologies to Support Engaged Learning in the Interaction Age: Taking a Pedagogically Disciplined Approach to Innovation

Yeonjeong Park, Jennifer M. Brill, Virginia Tech, USA

The purpose of this paper is to explore emerging technologies and engaged learning for current and future students in the interaction age. Emerging technologies such as mobile learning, Augmented Reality (AR), Virtual Reality (VR), and ubiquitous learning are briefly introduced and compared. However, these technologies must contribute to student learning, and in particular, student engagement in learning. Thus, the outcomes of a literature review regarding engagement and engaged learning are presented. Finally the link between emerging technologies and engaged learning is explored briefly, resulting in a call for empirical research.

A computer technology integration initiative: factors that contribute to use and non-use by the elementary classroom teacher

Delia Pass, Rutherford County Schools, USA

This paper explores factors that influence the use of computer technology in the elementary classroom by teachers involved in a school-wide initiative. The original study consisted of teacher volunteers for one of two groups, a treatment group that received a professional development intervention, and a comparison group that received no professional development. The intervention modeled a constructivist hands-on approach to creating technology-rich lessons based on classroom curricula and Internet technologies. The lessons created by the teachers in the treatment group were posted on a web-based site and made available for access by students of teachers in the research and comparison groups. Administrative surveys were collected at the end of each school year to investigate factors related to the use or nonuse of this computer technology resource by teachers with their students.

The Learning Page: teacher collaboration and student engagement

Delia Pass, Rutherford County Schools, USA

Abstract:The Learning Page for Students is a collaboratively built website created by teachers to promote student engagement using quality Internet resources for learning. The Learning Page for Students encourages the use of technology as a tool for active, directed learning through teacher-created lessons and themes aligned with the classroom curriculum. The focus of The Learning Page for Students is to increase computer technology integration into the K-5 classroom.

How to Set-Up Your LMS for Maximum Return on Investment

Andy Pasternak, The MITRE Corporation, USA

Presenter will discuss a six-phase one-year schedule for implementing an enterprise-wide Learning Management System. Phase One is technical needs analysis and product evaluation; Phase Two is LMS software acquisition, installation and configuration; Phase Three is population of the LMS with existing learning materials and user data, and the pilot testing thereof; Phase Four is LMS rollout and training; Phase Five is maintenance planning; and Phase Six, is courseware development. The goal of this process is to complete the implementation on time and on budget. The technical needs analysis phase is focused on technical requirements, and it is the key to this approach. We know that when projects of this type fails, it is almost always due to lack of initial analysis and planning. If data integration is not seamless, if management reporting is inadequate, if the system is not secure, stable, scalable and easy to use, then momentum will be lost.

Outta Site! The benefit of an online science and technology newsletter

Jessica Pater, Claudia Huff, Georgia Tech Research Institute, USA; Karen McMichael, Friends School of Atlanta, USA

OuttaSite! has served the Atlanta community, and beyond, for more than ten years. Originally, a newsletter of the Friends School of Atlanta, the goal was to enable families within the school to safely and securely access relevant and worthy resources residing in cyberspace. The newsletter has always aspired to integrate technological innovation, global awareness, and civic virtue into its content. The newsletter continues to bring relevant and emerging concepts and applications to an audience that might not receive this information otherwise. Since 1999, OuttaSite! has received two awards from the Society of Technical Communication (in the newsletter category). And most recently, the newsletter has seen more than 200% growth in its readership over the last year – further testimony to its usefulness and relevance.

Teacher Perceptions of the Oracle Academy Program

Elspeth Payne, University of Maryland, USA

Snapshot of six American high school teachers participating in Oracle Corporation's Academy program. Looks at teachers' backgrounds; level of familiarity with computer science; recruitment; experience learning the material; the benefits they believe they have received by being Oracle Academy teachers; financial implications to them. Related issues and challenges, including possible benefits to the school and the implications of commercialization in public education. Impact of IT curriculum on students is not addressed in any depth. There is little historical academic literature on this topic, which mostly tracks trends over the past thirty years, discussing computers as classroom tools. Does IT coursework engage students? Help them graduate from high school, continue on to college? What research would be helpful in understanding the impact of IT on students, teachers, schools, and eventually on the workforce and national economy?

To Wiki or not to Wiki? A case study of pedagogical and andragogical uses of wiki technology in a blended-learning environment

Kristin Pedder, Philip Marriott, University of South Australia, Australia

Increasingly, collaborative learning tools are seen as fundamental to maximizing the learning experience of adult learners within an increasingly techno-literate world. However, the majority of studies seem to have assumed that these collaborative tools will be unproblematically embraced by both trainers and learners, and that these tools will indeed be used collaboratively. This case study suggests that the successful integration of wiki technology in an undergraduate university course is dependent firstly on the individual's freedom to engage in and develop an andragogical, or adult, learning style, and, implicitly, whether the wiki tools are used collaboratively or for non-collaborative purposes. While students and course facilitators are both examined and compared as wiki users within this study, and, while the nature of their tasks in using the wiki technology were quite different, both groups undertook a similar learning process, acquiring the same skills.

Development of a Blended Doctoral Seminar

James Penrod, University of Memphis, USA

Over the past five years, an innovative graduate seminar of primarily doctoral students in higher education leadership has been developed at a large, urban, research university. The class is small, 15 or less, a required core course taken near the end of the program emphasizing higher education's need for administrative transformation and learning organization theory. It is designed using a blended approach of integrating information technology, assignments, team based exercises, and in-class activities intended to accommodate a variety of learning styles. This paper discusses technology (the Internet, a course management system, a smart classroom, student and faculty computers, etc.), teaching and learning methodology, pedagogy, and assessment using student evaluation forms and solicited student comments.

Establishing Processes and Best Practices for Web Conferencing Integration

Andy Petroski, Highmark, USA

In the fall of 2006, Highmark Corporate Learning received a request for web conferencing services from the Consumerism and Retail Marketing (CRM) Department. Web conferencing was identified as an option for reducing the amount of travel needed. Administration, quality assurance, and best practices for train-the-presenter were areas of focus for Corporate Learning. Planning, presentation strategy, and scheduling were addressed by CRM. Corporate Learning foresaw the potential for web conferencing as a valuable training and communication tool throughout the company. Efforts were focused

on creating processes, tools, and guides that could be rolled out as part of a company-wide initiative. Processes and guidelines will be discussed and demonstrated and forms and materials created as part of implementation will be shared. The benefits of web conferencing, training opportunities, industry resources, and future considerations and challenges for web conferencing will also be discussed.

Producing for Producers

Andy Petroski, Highmark, USA

Six eLearning modules were recently created to optimize training distribution to external partners – Producers selling Highmark insurance. The focus of the training is to reinforce important concepts for existing Producers and introduce concepts and common business expectations for new Producers. The eLearning modules are designed to engage the user through interactive exercises, games, and scenarios. Other features include easy navigation, audio-driven content, print resources, and completion notification. Some specific concepts that will be shared as part of the presentation include the business strategy, the instructional strategies used to create interactivity and increase engagement, the instructional design documents, image resources and graphic design strategies, development strategies, and the use of third-party software and components to rapidly create interactive elements.

Online Course Delivery Programs: Experiences of faculty members as a university moves from one online software package to another software package.

Marvin Peyton, James Huffman, Aubrey Moseley, Middle Tennessee State University, USA

Five years ago, MTSU implemented an online course delivery program and faculty expectations for implementation and success were high. The initial prospect for the software was exciting; but, utilization of the total delivery package proved to be cumbersome for a few and difficult for others to master. Many instructor's first experiences resulted in total disillusionment and they stopped using any online delivery software for either all or a portion of their course instruction. Good training sessions provided by the university's Instruction Technology Division help and assisted many instructors. Now that the university is changing to a different software vendor are similar experiences of high expectations anticipated A review of the issues leading the university to moving from one delivery package to another delivery package will be addressed. A rationale for moving to another online course delivery package will be addressed and a select few alternative delivery packages will be addressed.

Learning Outcomes, Interaction and Motivation in E-learning

Kaarina Pirila, The University of Oulu, Kajaani Learning Lab; Helsinki Polytechnic Stadia, Finland; Pertti Yli-Luoma, The University of Oulu, Kajaani Learning Lab, Finland

This study investigates how the level and the type of interaction impacts upon the motivation, satisfaction and the quality of student learning in three different learning groups: face-to-face, synchronous (real-time) e-learning and asynchronous (time-delayed) e-learning groups. The data used in the present study was collected when second year university students participated in a science course. The face-to-face group was in a traditional classroom environment with the instructor, the synchronous online group used a new interactive real-time computer program to take part in the lessons and the asynchronous group participated in the course only by watching the streamed videos. The quantitative analysis and the multivariate analysis with LISREL analysis were used. The findings show, that there are differences in how students perceive interaction, motivation, and satisfaction in different learning groups, but not in success in final exams and in critical thinking ability.

E-Teaching, Learning and Research Tools: RSS Feeds

Constance Pollard, Boise State University, USA; Richard Pollard, University of Idaho, USA

RSS, an acronym for Rich Site Summary, Real Simple Syndication, or RDF Site Summary, represents an important technology that allows the user to subscribe to web content through the use of an aggregator or feed reader. Although an obvious benefit of RSS feeds is the ability to stay current, the technology presents a powerful web-based method to support teaching, learning and research.This presentation describes relevant uses of RSS in the educational environment including strategies for designing lessons enriched through RSS and the role of RSS in providing collaborative research opportunities for students and teachers. The session features an overview of RSS, a demonstration of RSS in action as well as examples of exciting educational applications.

Fashion Education in a Virtual Environment?

Elaine Polvinen, Buffalo State College, USA

Abstract: This Virtual Fashion Project began with a simple question relating to the potential possibility and value of teaching fashion related concepts in a virtual environment. Fashion Education in a virtual setting? Is it possible? The experimental process that followed led to a vast array of new knowledge to link with current knowledge, new skills to link with existing skills. The exploration led to a new awareness about the variety of valuable real life professional concepts that can be simulated in a virtual environment for fashion students. When this project started the initial focus was primarily on virtual clothing creation but as it developed it included, fashion show production, product development, organization, packaging, logo branding, photography, merchandising, scripting, video clip production and editing. Virtual simulations provide an excellent educational tool for transferring and providing hands on experience with a variety of concepts required to succeed in the real world of the fashion/textile industry.

The Humanities in the Learning Space

Jack Pope, University of San Diego, USA

Given new calls for developing a cyberinfrastructure for the humanities, the authors examine the current status of the humanities, emphasizing that current thinking about the humanities does not address basic questions, with unknown and

(therefore) unknowable consequences for learning space design. They then look at contemporary learning space design, review exemplary current examples, and suggest ways to maximize that design in the light of a re-examination of the justification(s) for humanities pedagogy.

Critical Thinking and Collaboration in Post-Secondary Online Education

Laurie Posey, The George Washington University, USA

Web-based education provides a rich environment for developing the critical-thinking skills needed for collaborative problem-solving. This study investigated the impacts of cognitive flexibility hypermedia (CFH) on quality of collaboration and critical-thinking performance during computer-supported collaborative learning (CSCL). CFH did not significantly impact CSCL outcomes. Students' critical thinking scores were stable across assignments, and evidence suggested that higher performing students may have helped to improve the critical-thinking scores of lower performing students during CSCL. Discourse analysis revealed an emphasis on integrative postings, providing evidence of critical thinking within all CSCL groups. Students reported that communications and team cohesion problems impeded CSCL. These results provide a basis for further research regarding the conditions required for successful CSCL and the relationship between critical self-reflection and collaborative problem-solving.

Ethical Advisor v. 2: A Web-based simulator for teaching ethical decision-making

Michael Power, Lyse Langlois, Laval University, Canada

Advancements in educational technology in the field of computer-generated, simulated, learning environments are resulting in the development of innovative learning tools. Such tools, combined with a problem-based learning approach, enable learners to experience situations that, formerly, were either too expensive, too complex or too difficult to emulate. This paper reports on an online, multimedia simulator designed for assisting in the teaching of ethical decision-making. Ethical Advisor 2 is the result of an educational technologist and an ethicist working together to develop this Web-based learning environment which allows users to access theory-framed and evidence-based scenarios from a databank containing case studies of ethical dilemmas. EA2 walks them through the steps involved in solving ethical problems based on literature studied in class. Currently, there is no such multimedia tool in the teaching of ethics which illustrates actual, real-world, workplace moral dilemmas.

An Input Improvement for an Optical Character Recognition System using Noise Reduction

Nucharee Premchaiswadi, Dhurakij Pundit University, Thailand; Sukanya Yimngam, Kasetsart University, Thailand; Wichian Premchaiswadi, Siam University, Thailand

This paper presents a scheme for input improvement for an optical character recognition system by using noise reduction. It is focus on salt and pepper noise which can be found in almost document processing. The aim of this technique is to improve the recognition accuracy of an optical character recognition (OCR) system. This proposed scheme is a combination and extension of a Median Filter and Applied kFill Algorithm by using a window size of 3 by 3 and 5 by 5, depends on the size of noise. The scheme can be applied to documents both in gray scale and black and white format. The experimental results show that the proposed scheme can improve the recognition results of commercial available software significantly.

The Development of a Web Application and Geographic Information System for Learning Ethnolinguistic Groups

Wichian Premchaiswadi, Salintip Cheerapakorn, Siam University, Thailand; Nucharee Premchaiswadi, Dhurakij Pundit University, Thailand

The paper presents a development of a web application and GIS for a study of ethno linguistic groups. ArcView GIS is used as a tool for showing the ethno-linguistic groups in a map. Sino-Tibetan and Hmong-Mien are two groups selected as case studies. The data were converted into Scalable Vector Graphic (SVG) and presented via the internet. The research finds that boarder and more accessible information of the ethnic groups helps correct understanding of people toward the groups. The knowledge of the existence and the way of life of these ethnic groups effectively facilitates development among ethnic people and their communities. It also helps slow the decay of culture and local wisdom down, strengthen people's confidence in the community, and shape population-based policy of the country on language, culture and education.

Laptop use: a matter of learning styles and students' satisfaction at ITM

Franklyn Prescod, Deborah Fels, Ryerson University, Canada

Abstract: The effectiveness of technology-enabled learning very much depends on the extent to which the technologies enhance learning. There is little research on whether the application of ICT to assist learning, (e.g., laptops or notebooks) effectively delivers expected learning outcomes. To address this problem, we examined students' learning styles, and satisfaction with learning using laptop computer technology. Three surveys were administered to students enrolled in the laptop program at the School of Information Technology Management (ITM) at Ryerson University. Our findings provide a basis for further research on learning styles in this technology enabled environment. In particular, the impact of this laptop teaching and learning environment on students is the subject of a longitudinal study.

Review of Learning Objects, A Moving Target: Billions of "Resources" or "Knowledge Simplicity?"

W. Curtiss Priest, MIT and the Center for Information, Technology & Society, USA

At the 2004 E-Learn conference we presented a review of "Learning Object" Activities and Efforts. At E-Learn, 2002, we observed how the IEEE efforts, the Canadian Canarie efforts, and the work of others, and we described the isolation among efforts and described the lack of unity in identifying learning, or knowledge objects. And at AACE/SITE (2007), we presented a brief framework content knowledge and pedagogical knowledge. Concerned that progress involving objects is being measured, in part, by the shear numbers of "objects" we describe the formation of an International Collaborative to 1.) bring simplicity to the process by identifying, not only metataged objects but objects that arise out of an evolutionary growth

of a basic core of knowledge, and 2.) assure that our world-wide, limited resources for creating objects enables creators to build on each other's objects, and greatly reduce redundancy via a transition from "wikipedia" to wiki-like object creation and refinement.

Audiobooks for Meaningful Learning

Susan Prion, Mathew Mitchell, University of San Francisco, USA

Research consistently indicates that audio can be a powerful influence on student learning given the right conditions (Ginns, 2005; Mayer, 2005). Our session focuses on the potential benefits of audiobook packages. An audiobook package combines the actual audio file along with other relevant learning materials such as PDF handouts of presentation notes and visual models, additional reading materials, and multimedia presentations. We'll present a model for guiding the development of effective audiobook learning experiences and share our practical experiences using the audiobook format with both undergraduate and doctoral-level students.

Learning effectiveness and the modality effect in the pre-licensure health science classroom

Susan Prion, Mathew Mitchell, University of San Francisco, USA

This study will attempt to assess the learning effectiveness of multimedia instructional materials for complex health science information when the information is presented in a self-paced, integrated visual and verbal mode. Specifically, the students were offered one summary visual and a 2-5 minute audio commentary explaining the visual. It builds on previous research with animated agent narration by evaluating the learning impact of the instructor as narrator.

Development of critical thinking through WebQuests: A case of English language learners in Thailand

Nunthika Puthikanon, Indiana University Bloomington, USA

Research shows WebQuests help develop critical thinking among L1 students; however, little research demonstrates whether the same results occur when WebQuests are used with ESL/EFL students. This study explores the process of how EFL students develop critical thinking through the use of WebQuests. The subjects were second-year university students from Thailand enrolled in a compulsory English reading course. A rubric built upon Bloom's Taxonomy concept of critical thinking was developed to evaluate WebQuests that show potential to promote critical thinking. A highly-rated WebQuest called "Solve it with Logic" was then selected to be used as part of the subjects' supplementary reading activities. Results show that not only the WebQuest task encouraged language learning while students worked collaboratively, it also led them to critical thinking. Student final projects showed different levels of language production and critical thinking. Teachers also played an important role in promoting critical thinking skills in classrooms.

Different Group Configurations and Different Reading and Writing Activities in Online Graduate Courses

Mingzhu Qiu, Jim Hewitt, CTL, OISE/UT, Canada

Abstract: Note reading and writing in online courses mediate between the intent of curricular requirement and instruction that occurs in virtual classrooms. Online group configurations almost certainly have important effects on online course participation. However, the effects of group configurations on note reading and writing are not clear and have not been empirically investigated. This study explored the relationships between different group configurations (large whole classes, large classes with subgroups, and small whole classes) and note reading and writing activities in discussions in online graduate courses. We conducted a quantitative analysis of 25 online graduate courses from OISE/UT WebKF databases. The results revealed that students' and instructors' note reading and note writing activities differed across the three different group configurations, and thus may affect learning results. This study also intends to inform graduate online course instructors and designers of paying attention to the effects of group configurations on note reading and writing.

How Different Group Configurations Affected Discussion Thread Development in Online Graduate Courses?

Mingzhu Qiu, CTL, OISE/UT, Canada

Abstract: This study is to explore the relationship between group configurations (e.g., large whole classes, large classes with subgroups, and small whole classes) and the discussion thread development in online discussions in graduate courses. I analyzed 25 OISE/UT WebKF online course databases to investigate whether different group configurations affect discussion thread development. The research results uncovered that different group configurations did affected discussion thread development. The large classes with subgroup discussions encouraged more discussion threads but did not shorten the average length of the threads compared with large whole class discussions. The small whole class discussions had the least advantage in encouraging students to start discussion threads and keep the threads growing. Detailed data analysis and findings of this study are presented in this article. This study also intends to inform online course instructors and designers to pay attention to grouping strategies and discussions thread developments in online graduate-level course designing.

Semantic Structures as Cognitive Tools to Support Reading

Yongqiang Qiu, Adel Elsayed, University of Bolton, UK

Reading text for knowledge acquisition is a linear process in which a user reads verbal content by scanning text in a sequential manner albeit with fixative and saccadic eye movements. It is an established fact that computer users prefer to read text from papers than off computer screens. Hence, computers must take a more active role in supporting knowledge acquisition through reading than just display text. This paper reports on a research program that aims to find a new role for computers in supporting this process. One way to do this is by eliciting the semantic and conceptual content of text in an explicit representation, the semantic and conceptual structure. Providing appropriate means for exploring such structures can facilitate non-linear navigation of text, which may prove to be a more effective and efficient way for acquiring knowledge from orthographic content. Based on this, we develop semantic structures as cognitive tools to support text-based reading.

Improving the effectiveness of interactive learning environments through facilitation: An experimental study

Hassan Qudrat-Ullah, Walden University, USA

The effectiveness of computer simulation based interactive learning environments (ILEs) in promoting decision making and learning in complex, dynamic tasks has rarely been evaluated. This paper describes an empirical, laboratory-experiment-based evaluation of the effectiveness of facilitation based ILE. Subjects' performance is evaluated on 4 criteria: task performance, structural knowledge, heuristics knowledge, and cognitive effort. It is found that the subjects provided with post-task facilitation performed the best, followed by those provided with in-task facilitation. Contrary to the hypothesis, subjects provided with pre-task facilitation performed poorly.

Elearning 2.0: community, control and the challenge for Universities.

James Quealy, Lisa Wise, University of Melbourne, Australia

With the advent of elearning 2.0 Universities are once again considering how to use a new set of technologies to support teaching and learning. Previous multimedia, CBL and LMS based elearning initiatives have failed to deliver on many of the promises made. If Universities fail to learn from these experiences we argue they will once produce outcomes which facilitate management control of the teaching and learning process rather then delivering on the promise of fostering communities of practice. Universities should understand the basis for university teaching and learning and, in research-led institutions in particular, recognise that the existing role of academics as reflective practitioners embedded in their own communities provides a sustainable model for teaching. Educational design practitioners, now more than ever, should focus on organisational learning and promoting understanding and practices that support and continue rather than disrupt academic practices.

Humanizing online synchronous classes to minimize transactional distance

Tamara Rabinovich, Ruth Horwitz, Bentley College, USA

Since 2001, Bentley College has been increasing the number of graduate courses it offers online. Through Saba's web collaboration software Centra© Live, professors teach both on campus and online students simultaneously, creating a real time integrated online/campus environment. Nevertheless, online students are separated geographically from in-class students and the instructor. According to Moore (1991) the physical separation leads to a psychological and communication gap, creating transactional distance. The balance between dialog and structure determines transactional distance: as dialog increases and structure decreases, this distance between the educator and learner is minimized. We will discuss transactional distance theory and how we minimize this distance for online learners. We will share our experience in balancing the dialog-structure relationship using Centra's synchronous communication tools and asynchronous technologies such as blogs, wikis, and discussion boards.

MultiStyles Adaptive E_Laerning System Based on Web Technologies and AI Methodologies

Abdu Ragab, Faculty of Computing and Information Technology, Saudi Arabia

Web-based learning tools provide integrated environments of various technologies to support diverse educators' and learners' needs via the Internet. The old-fashioned view on e-learning focuses on the content and the learning process itself. But the new learning theorems treat topics like constructivism and adaptive collaboration. There is a need for systems that can adapt to learners with very different backgrounds, prior knowledge of the subject and learning goals. This paper presents an adaptive e-learning model that achieves different features that enhance the adaptation from the viewpoint of AI. A comparative analysis of up-to-date adaptive E-learning systems is given. Architecture for multi-styles adaptive E-learning system is then proposed. A prototype model of the system is built. System practical evaluation is performed. The system is used for teaching artificial intelligence courses at the Computer Department of Teachers' College in Jeddah. Results show that the model is robust, efficient and helps educators to achieve higher learning gain.

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A Comparison Between Computer Supported Collaborative Learning and the Traditional Means in Learning Probability Concepts

Carmelita Ragasa, University of the East Manila, Philippines

This study is a quasi experimental research involving 35 students in the experimental group and 8 students in the control group all college sophomores. The following are the findings of the study. There is a significant difference between the mean of the pretest and the mean of the posttest in the experimental group. There is no significant difference between the mean of the pretest and the mean of the posttest in the control group. There is no significant difference between the pretests of both the experimental and the control group. There is a significant difference between the posttests of the experimental and the control groups. The variables that are correlated significantly at .05 level of significance are: high school mathematics grade and the college entrance test total; the high school general weighted average with the college entrance test total. All the variables considered in the study are the predictors of the posttest achievement.

Improve University Education through ICTs with Special Reference to the Governmental Universities in Sudan

Najlaa Rahamtalla, University of Sinnar, Sudan

in this proposal the researcher try to investigate what had happened to the integration of ICTs in university teaching and that through questionnaire data in selected group of governmental universties in Sudan. the data will be analyzed by using desciptive and analytical statisical methods to evalute the integration of ICTs in universities and what effects it?

Higher Education and Globalization in Iran

Marjan Rahmati, Ministry of Science, Research and Technology, Iran (Islamic Republic Of)

Iran has a large network of private, public, and state affiliated universities offering degrees in higher education. State-run universities of Iran are under the direct supervision of Iran's Ministry of Science, Research and Information Technology and Ministry of Health and Medical Education. In a research down by the author in 2004 about the title has shown that globalization is a phenomenon with a lot of advantages and disadvantages in subjects and results. But the countries in the world could coordinate their plans, determine their political status and freely pursue their economic, social and cultural development coordinated with this process. They have believed that higher education in the age of Globalization is another equivalent for the need for a new regulatory framework for quality assurance, accreditation and recognition in qualifications in higher education.

Ten Years of New Technology Standards in California: Are Today's Teachers Prepared for the Classroom?

Pamela Redmond, University of San Francisco, USA; Nada Mach, California State University Dominguez Hills, USA

The State of California passed new technology standards for teachers in 1998 and every credential-issuing institution was required to develop methodology and assessments to ensure that candidates exiting their program met those standards. This Best Practices session will present methodology for assessing teacher readiness to use technology including: personal attitude, experience with computers and related technologies, ability to meet teacher preparation standards, and professional standards for teaching. The authors will share results of field testing last spring and early summer, as well as statewide roll-out in December, 2007.

Evaluating E-Learning

Thomas Reeves, The University of Georgia, USA

To conduct a comprehensive evaluation of e-learning requires a "triangulation" approach whereby multiple models and procedures are applied. Conducting comprehensive evaluations of e-learning in a timely and efficient manner is the focus of this tutorial. Why is evaluation of interactive learning so important? Around the world, each month sees the introduction of many commercially produced or locally developed programs promoted as effective e-learning systems. Yet systematic evaluation of the implementation and efficacy of these systems is often lacking. This tutorial is specifically designed to establish evaluation as a key strategy throughout the design, development, and implementation of e-learning at all levels of education and training. Participants will be given access to an electronic performance support system (EPSS) designed to help educators evaluate e-learning.

MERLOT's Integration of Creative Commons Licensing

Sorel Reisman, California State University, Office of the Chancellor, USA

MERLOT, the Multimedia Educational Resource for Learning and Online Teaching (www.merlot.org) is a consortium of higher education institutions, professional societies, digital libraries, and corporate partners. Their goal is to improve and support the effectiveness of technology-based teaching and learning by increasing the quantity and quality of web-based, peer reviewed learning materials that can be incorporated into faculty-designed courses. In order to mitigate against abuse and misuse of its web content, MERLOT carefully analyzed the constituent elements of its website, and applied Creative Commons licensing principles to those elements.

An Online Peer and Self Assessment System to Support Online Collaborative Learning

Paul Resta, The University of Texas at Austin, USA

A challenge in online collaborative learning is assuring that all members of a virtual learning team are contributing to the work of the group. One strategy to hold individual members of a learning team accountable for their efforts is through the use of peer and self evaluation. This presentation demonstrates a web-based assessment system developed by the researchers to support individual, peer, and group assessment. The system allows students to rate their own performance on a particular project, as well as the performance of their teammates, based on criteria developed by class or the instructor. The system then generates aggregated performance data in a graphic display so that students can see how their classmates perceived their own and their classmates' contributions to the effort. While students only see aggregated data, thereby maintaining anonymity, the instructor can see each individual's ratings of themselves and of their teammates.

E-Learning and E-Litism: The Challenges and Opportunities for E-learning to Reduce the Global Digital/Educational Divide

Paul Resta, University of Texas Learning Technology Center, USA

Although there has been significant growth worldwide in access to computers and the Internet, the digital divide continues to be a major form of social, economic and educational exclusion for many peoples across the globe. The World Summit on the Information Society (Geneva 2003) declared "[the] common desire and commitment to build a people-centered, inclusive and development-oriented Information Society where everyone can create, access, utilize and share information and knowledge." The presentation discusses the global context of the digital divide and the challenges and opportunities for e-learning to help reduce the growing technological and educational disparity between developed and developing countries.

Global Perspectives on Trends, Issues and Challenges in E-Learning for Teacher Development

Paul Resta, University of Texas Learning Technology Center, USA; Therese Laferriere, Laval University, Canada; Alain Breuleux, McGill University, Canada; Niki Davis, Iowa State University, USA

The panel session will focus on key topics and issues related to the use of e-Learning for teacher development. The international group of panelists includes chapter authors of a new book commissioned by UNESCO entitled Teacher Development in an E-Learning Age: A Policy and Planning Guide. The panelists bring differing perspectives on the dimensions of e-learning and the challenges, policy issues, opportunities and trends in the use of e-learning for teacher development in both developed and developing nations. Discussion will focus on four aspects of e-learning for teacher development including: accessing online resources; online courses and degree programs; blended learning environments; and networked communities. Panelists will share their diverse views of the global context and role of e-learning for teacher development and the challenge of preparing 15-35 million teachers needed in the next 15 years to meet UNESCO's Education for All goals.

Knowledge Chain: A new approach to improve learning by using PBL

Juliana Rezende, Jano Moreira de Souza, COPPE/UFRJ - Graduate School of Computer Science, Federal University of Rio de Janeiro, Brazil

In this paper we consider a process that improves the learning process by building personal knowledge through the exchange of knowledge chains in learning communities. The process differential is the addition of “how to use” the available knowledge to its “authors” (who), “localization” (where), and “content” (what), which are commonly used. This paper shows how the proposed idea can be applied to project and problem based learning theories, which are relevant theories. These theories were choose because, as the proposed idea is based on the sharing of knowledge chains, it is better applied to some learning theories, mainly those that focus on collaboration, and those centered on an active learner.

Preparing Teachers to Use Technology

Nataliya Reznichenko, Morgan State University, Baltimore MD, USA

In the Digital Age, schools should ensure that technology is used effectively to create new opportunities for learning and to promote student achievement. Educational technology requires qualified teachers who can integrate technology into the curriculum, align it with student learning goals, and use it for engaged-learning projects. Therefore, in using technology to improve the quality of students’ learning, professional development for teachers becomes the key issue. The issue of professional development for preparing teachers to use technology was discussed in a personal interview with Professor Sylvia Sorkin at Community College of Baltimore County (CCBC), Essex, MD, U.S. Among questions discussed in the interview were the ways in which community college can enable teachers to make effective use of technology, the models and strategies effective for preparing teachers to integrate technology, and the evidence to confirm that professional development programs are effective.

Model of e-Learning Teaching-Learning Contents Development for Self-directed Learning : Focused on vocational high school students

Hyeon Mi Rha, 1Korea Research Institute for Vocational Education & Training, Korea (South); Sung Yul Rhew, Soongsil University, Korea (South)

As the expanding of the interests for Internet-based e-Learning, the concern about design, which ensures high quality educational contents and efficiently develops the contents, has been increased. However, the currently developed contents were mostly for elementary and middle school students, that is, there are not enough well-designed contents for the vocational high school students. Therefore, it is necessary to develop the contents which can help the vocational high school students to rebuild the curriculum self-initiatively and maximize the learners’ learning effects. This paper proposes the e-Learning teaching·learning contents development model for self-initiative learning to develop the vocational high school students' e-Learning contents. The proposed model is consisted with 5 stages, plan/analysis of the educational needs, design, manufacturing, operation and management, and assessment, which are similar to stages of the original e-Learning contents development model.

geogebraTUTOR : une nouvelle approche pour la recherche sur l’apprentissage compétentiel et instrumenté de la géométrie à l’école secondaire

Philippe R. Richard, Université de Montréal, Canada; Josep M Fortuny, Universitat Autònoma de Barcelona, Spain; Markus Hohenwarter, Florida Atlantic University, USA; Michel Gagnon, École Polytechnique de Montréal, Canada

Le but de notre exposé est de montrer une nouvelle approche pour la recherche sur l’apprentissage de la géométrie à l’école secondaire à partir d’un environnement informatique d’apprentissage humain conçu par notre équipe de recherche (geogebraTUTOR). Le texte présente les objectifs de notre projet, le contexte de réalisation, dont les axes de références du cadre théorique, ainsi que la méthode de recherche avec ses fondements, la population à qui s’adresse la recherche et son développement. Nous concluons brièvement avec les retombées attendues dans le milieu scolaire.

The Relationship between Metacognitive Thinking, Activity and Attitudes of Students in an E-Learning Course

Rikki Rimor, The Open University of Israel, Teachers College of Technology, Israel; Rivka Wadmany, Einat Rozner, Teachers College of Technology, Israel

The research examines the relationship between metacognitive thinking, forum activities and attitudes of students in an e-learning course. 270 students' messages were sent to the online forum. The content of these messages was analyzed according to Flavell’s metacognitive dimensions. Students with positive attitudes toward learning in the forum scored significantly higher on the examined metacognitive measures compared to those with negative attitudes. Moreover, students with high level of activity in the forum demonstrated a significant higher metacognitive level than did students whose

activity level in the forum was low. Finally, a positive correlation was found between students' rate of activity and their positive attitudes toward the online forum. The relationship found between attitude and activity on one hand and metacognitive thinking on the other, signifies the importance of studying the cognitive contribution made by e-learning courses to learning and thinking.

A Catalogue of Primitive Scenario-Types. The First Step to the Automation of Learning Scenarios

Angels Rius, Open University of Catalonia, Spain

Issues such as the standardization of Learning Objects (LO) and their reusability have been the target of numerous and important contributions by experts in the area. Other issues also related to LMS (Learning Management Systems), and on which there is not much knowledge is that of the automation of processes that usually occur in these kinds of systems and their boundaries. In this sense and with the aim of achieving executable process specifications, this paper presents a catalogue of basic or primitive scenarios that will be the basis of a wide and more complete catalogue. In order to achieve a reduced and sufficient set of primitive scenarios, we have taken as a reference some existing specifications (IMS DRI, LORI, IEEE LTSC). Later, we will present an example of a more complex scenario using those basic scenarios and showing the rules for composing them and creating another one.

Critical Care Nursing Hub: online learning for Ontario's critical care nurses

Judith Robinson, Sandra Goldsworthy, June MacDonald-Jenkins, Debbie Morrison, Maureen Wideman, Durham College, Canada

In partnership with the Ontario government, Durham College has developed the first critical care e-learning program in the country. It was designed in response to the need to improve the recruitment, retention and training of critical care nurses, consistent with provincially recognized standards and core competencies. The Durham College Critical Care e-learning program enables accessible, quality education for new nurses in the critical care field as well as provides a venue for existing nurses to engage in training to maintain or develop their skill sets. Six of the eight courses in the program are taught in a highly interactive online learning environment to provide in-depth critical care content coupled with high academic standards. The final two courses are held in simulation labs and in the hospital environment. The results - more critical care nurses that are better trained which should have a direct impact on patient safety and assist in the reduction of hospital wait times.

Experiences with digital alphabetization in a community of migrants families

Ma. Alejandra Rocha Silva, Ana Isabel Zermeño Flores, Juan Contreras-Castillo, Ricardo Acosta-Diaz, Erick Velazquez-Godinez, Universidad de Colima, Mexico

Citizens around the world live and use ICT's everyday, which requires them to develop skills and knowledge to interact with technology. This becomes more evident in the most developed countries such as the United States, Canada and France among others. This proliferation of ICT's reduces the immigrants' opportunities for work and raises a technological barrier with the local community and a lack of communication with their communities of origin. To help reduce the digital divide within the immigrants' communities, we designed and developed a technological alphabetization Web portal called Colimenses sin Fronteras, which main objective is to provide immigrants with the basic skills and knowledge that allows them to communicate and establish stronger bonds with the relatives and families that remain in their communities of origin. We would also like to focus on communities with higher levels of expulsion to create networks of immigrants so that they introduce the portal to others.

An on-line teacher training course in a Mexican University

Myriam Romero, Universidad Autónoma de Baja California, Mexico

E-learning has recently become a basic skill for university teachers; the Universidad Autónoma de Baja California in México has encouraged the development of on-line courses for undergraduate and graduate programs. The presenter will explain the experiences of e-tutors and -learners in a teacher training course called Distance and Open Education which is an elective of the Master in Teaching offered by the Language and the Pedagogy Schools. Some aspects that will be illustrated are: the approach behind the program, the organization of it, activities and materials, the techniques for interacting, monitoring and assessing as well as the results of the program and its improvement.

Curriculum Management and Review: an ontology-based solution.

Marco Ronchetti, Dipartimento di Informatica e Telecommunicazioni, Universita di Trento, Italy; Joseph Sant, Sheridan Institute for Technology and Advanced Learning, Canada

Ontologies provide a means to classify some aspects of the world and then to reason on that classification. Recently, various authors have recommended the use of ontologies that classify subject domains, courses, learning objects and educational processes in E-Learning systems and processes. One promising application of ontologies is in the general management of entire curricula and in program reviews. In this paper we present a strategy for managing, inspecting and monitoring a full course of study (a program), that will aid in the quality assurance of didactic offerings and thereby help improve the overall quality of these offerings.

Designing Lessons with Multimedia and Technology for ESL A proposed model

Louise Roodt, North-West University, South Africa

Abstract: Designing multimedia and technology enhanced lessons should be done with careful considerations to ensure that it is used to promote better learning and understanding. The Millennial generation's characteristics are briefly discussed as guideline to select appropriate material. The way learners think and learn is another aspect to consider. A proposed model – incorporating a revised Bloom's Taxonomy and an integrated cognitive processing model, in ESL aim to assist in designing multimedia lessons with better learning and understanding.

From single tool to complex teaching and learning toolkit: Audiographics comes of age.

Stephen Rowe, Allan Ellis, Southern Cross University, Australia

Three stages can be identified in the evolution of audiographic technologies. Over the last two decades staff at Southern Cross University have made use of this technology during each of its developmental stages. In 2005 and 2006 the School of Commerce and Management successfully introduced and adopted one of the new stage three software products, Elluminate Live! In 2007 the University purchased a site licence allowing unlimited university wide use. To understand and assist in the uptake of this new generation of audiographics, this paper identifies and maps features against traditional teaching and learning practices. The capabilities actually extend what is now possible in the classroom and with far fewer resources. The potential to make meaningful positive responses to long standing calls for a shift in learning and teaching to a more student-centred paradigm away from an instructor focused one has never been more attainable.

Managing LMS Change in a University E-Learning Program

Beth Rubin, DePaul University, School for New Learning, USA

Changing a college's Learning Management System is significant and difficult to implement. In this case of changing a private college's LMS, the Gleicher Change Formula was used to analyze the key factors needed to implement this change, and political mapping of the key sources of power and attitudes toward the change were used to identify sources of political resistance. The need for change was communicated; a clear vision of the future was developed and communicated widely; and processes and tools were developed to enact and support the transition. Based on the political analysis, likely opponents and supporters were identified, enabling the use of interpersonal influence to reduce resistance sufficiently to implement the change. These models can be used by any unit trying to implement change in e-learning technologies.

An Ounce of Prevention for Keeping Private Data Secure

Melanie Ruda, Nancy Hendrickson, Seward Inc., USA

Seward Inc. worked with the University of Minnesota to develop a data privacy and security awareness program for the university's employees and faculty. This web-based program is now available to other U.S. institutions of higher learning in a basic, basic plus, or customized package. The program consists of four 10-20 minute courses that cover topics such as distinguishing between public and private data, securing one's computer and work environment, and recognizing breach of security incidents. In this presentation, two instructional designers from Seward Inc. will offer a look at the courses—they will show how the interactive learning is contextualized within work-related scenarios and relevant news stories. They will also demonstrate the program's administrative capabilities for managing users, customizing content, and generating reports.

GEOWORLDS: Utilizing Problem-Based Scenarios in Second Life to Develop Advanced Geosciences Knowledge

Donna Russell, University of Missouri-Kansas City, USA

Abstract: In this proposal we describe the design of an advanced geosciences program that uses Second Life Teen World to develop problem-based learning abilities and geosciences concepts in urban students. GeoWorlds are complex problem-based scenarios designed into 3-D virtual environments where students can interact with the virtual environment, AI guides and each other to develop a solution to the problem space. The design team also created a research program that utilizes sociocultural learning theories to develop an analytical qualitative analysis of the learning processes of the students.

Employing WIKI Technology to Facilitate an Online Living Library

Joseph Russo, Montclair State University, USA

The ADP Center for Teacher Preparation and Learning Technologies at Montclair State University is home to the largest curriculum library (CRC) in NJ. Its collection includes a wide array of resources available in both print and media to more than 40,000 patrons, including pre-service teachers, practicing P-20 educators and teacher education faculty. The CRC worked in tandem with the College Technology Coordinator to identify and implement an open source online library management tool that allows patrons to play an active role in the collection building and management process. Real-time participatory access to the collection engages patrons by allowing them to contribute commentary on existing special collections and individual resources as well as suggestions for additional items. This new system utilizes a WIKI to facilitate this innovative "living library" resulting in a connected community of patrons that use the site to construct a more meaningful and user driven collection.

Four Vignettes of Learning: Wiki Wiki Web or What Went Wrong

Alison Ruth, Aaron Ruutz, Griffith University, Australia

This paper discusses some of the errors of judgment made in attempts by the authors to introduce blogs and wikis into teaching environments. It highlights the process of attempting to develop spaces for intersubjectivity to develop through technology-enhanced environments. The underlying aim of all the cases was to introduce new technologies. Lessons learnt include the need for structuring assessment processes and that the technologies can support group work and potentially collaborative assessment.

Developing Web-Based Tools and Support Model for Lifelong Learning and Learning Evaluation Processes in Higher Education – ICT- Framework for Course and Learning Management, Personal Study Plans, Guidance and Counseling in University of Jyvaskyla

Merja Ruuska, Markku Närhi, University of Jyvaskyla, Finland

University of Jyvaskyla, high level research organization and University of Excellence in Adult Education, has developed several innovative web-based tools for teaching, learning, study guidance and evaluation. They will be integrated in the national student management and guidance system, and become part of student mobility and lifelong learning support system in European Higher Education Area.

Towards a Collaborative Learning Flow Pattern using Educational Games in Learning Activities

Eveline Sa, Jeane Teixeira, Clovis Fernandes, ITA, Brazil

To integrate the use of Educational Games and Collaboration in developing Learning Activities (LA) can become the learning process more meaning. The development those activities requires the description of the learning flow in order to identify the resources, actors and actions of this process. Authorship tolls used for development for learning activities based in Collaborative Learning Flow Patterns (CLFP) will be boarded. In this paper is proposed the extension of Collaborative Learning Flow Patterns (CLFP) with use of Educational Games as tools to promote collaboration among learners. The Learning Design that foresees the use the proposed patterns can propitiate developing learning activities that involve ludics and interactive aspects.

Cognitive Aspects of Teaching and Learning Mathematics Using Technology

Farrokh Saba, University of Nevada, Las Vegas, USA

Abstract: This qualitative and quantitative research shows the effectiveness of using web-based technologies in teaching and learning mathematics based on cognitive learning theories. The analysis of data indicated that students benefited from existing technologies for mathematics courses taught online. Data was collected and analyzed based on 16 online mathematics courses with a total of 540 students. The instructor presented these mathematics courses by using cognitive learning theories and certain instructional designs. In addition, the educational implications and social benefits of teaching and learning mathematics online with public interest are discussed. Teaching mathematics online provides educational mobility that will close the gap between nations while it improves equity of access and ultimately serve students' learning.

The Impact of Web 2.0 on Learning at a Technical University - A usage survey

Christian Safran, Christian Gütl, Denis Helic, IICM, TU Graz, Austria

The recent years saw a lot of discussion about technologies and applications labeled "Web 2.0" and its influence on e-learning. "Web 2.0", labeling an idea rather than a concrete technology, lead to the definition of the related concept "E-Learning 2.0" and research on possible use of corresponding online tools and technologies in E-Learning has been published. Yet the actual inclusion of such concepts in everyday learning situations, especially in university settings, remains undetermined. This paper describes the analysis of a survey conducted to verify the influence of "Web 2.0" applications for Learning at the Graz University of Technology. The goal was to investigate the frequency of passive use, work a a developer and use in lectures and learning, as well as the influence of the education level thereon. The survey was released to students of lectures ranging from freshmen to master students.

High-Definition Lecture Video Distribution System for Chalk-and-Talk Based Lectures

Ryota Sakamoto, Yoshihiko Nomura, Tokuhiro Sugiura, Norihiko Kato, Mie University, Japan

The authors proposed a high-quality and small-capacity lecture-video-file creating system for traditional chalk-and-talk based lectures: it will be used for distance e-learning. The previous system utilized two kinds of devices such a digital still camera and a digital video camera. The proposed system enables us to distribute high-definition image quality with small bit rate communication lines. As a result of an experiment, an e-lecture using the proposed file creating system was confirmed to be effective for providing sufficiently legible lecture images.

A Web-Gis for learning and Understanding about Exhibits

Carola Salis, Eva Lorrai, Andrea Mameli, Fabrizio Murgia, Laura Muscas, CRS4, Italy

The Centre for Advanced Studies, Research and Development in Sardinia, among its several branches, has a department which focuses on the research and development of remote tools for e-learning. Our department is currently developing a Web Geographical Information System for Museum Instructional Activity that will be piloted with students from primary school and high school. WEB-GLUE aims to enhance a didactic approach for teachers who will be able to access and update cultural activities throughout the region and giving them the ideal conditions to correct choices. The main goal is to realize a tool which may support the pedagogic work in choosing the cultural visits, the training of teachers and students, and in the post-visitation pedagogic continuity which may be offered. Through such a tool and in correlation with such goals, cultural virtual games activities and the tracing of past events may be realized.

Creating Interactive Images Using PowerPoint

Pavel Samsonov, University of Louisiana, USA; Ellen Finkelstein, finkelstein.inc, USA

The presentation explains how to create interactive images using PowerPoint. This technique can be successfully used to develop interactive maps, schemes, diagrams. Little or no PowerPoint skills are required.

Simple Techniques to Create Interactive Reviews in PowerPoint

Pavel Samsonov, University of Louisiana, USA

The presentation describes simple but effective techniques to develop interactive reviews in PowerPoint. This technique can be used by any teacher, educator or presenter; no or very little special PowerPoint skills are required.

A Virtual Community for Educational Computing, EDUTICS

Jaime Sanchez, Felipe Vera, University of Chile, Chile

The study describes the development of a technological solution, based on the formation of a virtual community, which allows for academic offers to be made at-a-distance, and which also assures the development of knowledge networks and a continuing connection between users and the institution. This process begins with the search for information and compiling concepts of the virtual campus, virtual communities and virtual learning communities as a framework of reference for decision making on the construction of the EDUTICS community. Initial results are presented which will provide for an analysis of the strengths and weaknesses of the innovation and which will help to elaborate future work in order to assure the continuity of the community

Distributed Cognition in Computer Skills Training

Juan Carlos Sanchez Lozano, Concordia University, Canada

Abstract: Computer skills instruction has been predominantly geared towards helping the learner build a 'runable' model of the core functionality of the system. The idea of cognition as a purely internal process has been challenged by distributed cognition (DC). Instead, successful completion of a task seems to be the result of a perceptual flow of information between the display and the user. Visual cues, information structures, and interaction strategies play a more important role than initially thought. However, these findings have rarely been used in instructional interventions. This paper describes a study in progress that applies distributed cognition principles to instructional design, and evaluates the effect on learning. In particular, the Distributed Information Resources Model is used to inform the design of an online course to teach basic animation concepts in Flash, as well as a game that acts as a practice field for display-based interaction.

Medical Students' Self-assessment Abilities: A Comparison of Computer-Based and Standardized Patient Exams

Maria Sandberg, Karolinska Institutet, Sweden; Pat Youngblood, SUMMIT, Stanford University School of Medicine, USA; Jennifer Hayes, Stanford University School of Medicine, USA; Pauline Brutlag, SUMMIT, Stanford University School of Medicine, USA; Andrew Nevins, Stanford University School of Medicine, USA; Nabil Zary, Uno Fors, LIME, Karolinska Institutet, Sweden; Parvati Dev, SUMMIT, Stanford University School of Medicine, USA; Neil Gesundheit, Stanford University School of Medicine, USA

Abstract: Good self-assessment abilities may be one of the most important skills for medical students to acquire, both for successful completion of highly demanding educational programs and to ensure continuing professional development in their future careers as physicians. Still, studies show that many students have difficulties accurately assessing themselves. This study investigates second-year medical students' (N=41) ability to accurately assess their performance on two types of case-based examinations for clinical problem-solving—a computer-based simulated patient exam (Case-Ex) and a standardized patient exam (SP). Four patient cases were used in each exam and were matched as to level of difficulty. The purpose was to investigate differences in students' self-assessment accuracy between the two examination methods. Results indicate that students self-assess inaccurately, and that this occurs more frequently among low performing students. In addition, we found a slight tendency for students to self-assess more accurately with the Case-Ex examination method.

Ethical Issues in Online Research and Assessment

Ieda Santos, University of Warwick, UK; John LeBaron, Western Carolina University, United States, USA; Robert Crow, Dixie McGinty, Western Carolina University, USA

Based on a post-graduate online course recently taught at a major American public university, this paper explores the ethical issues associated with analysis of computer conference transcripts. It discusses how lack or negative responses of potential participants can limit the analysis of conference transcripts. The paper also discusses the importance of triangulating the interpretations of the transcripts with other data sources used in the study. This is followed by a general discussion of the difficulties encountered throughout the study and raises issues to advance understanding in this new area of inquiry. Based on the results of this study, the paper recommends a series of strategies for future research

e-Assessment Tools in the Open. A Review from a Different View: Standards & Pedagogy

Silvia Sanz-Santamaria, Dept. of Mathematics and Computer Engineering (Public University of Navarre), Spain; Julian Gutierrez Serrano, Jose A. Vadillo Zorita, Dept. of Computer Languages and Systems (University of the Basque Country), Spain

This paper presents a review of e-assessment tools from a different point of view than previous studies. The features analyzed are: the use of standards and the application of pedagogical principles and theories. Concretely, the second aspect collects three main topics: the variety of types of items used in the assessment process, the inclusion of adaptive techniques for adjusting the assessment to the knowledge level of the learner, and the structure of the pedagogical domain where the assessment takes part. Then, there is an analysis that enhances the main data putted forward before, and classifies the tools according to the next parameters: standards, adaptation and pedagogy.

A review on Ontology Tools from Knowledge Management Perspective

Biplab Sarker, Innovatia Inc., Canada; Peter Wallace, William Gill, Innovatia Inc, Canada

Ontology is a fundamental data object for organizing knowledge in a structured way in many areas ranging from philosophy to Knowledge Management. e-learning is an essential part of dynamic knowledge management. In this paper, we present a brief description on the role of ontology in e-learning and review the ontology building tools. The purpose for reviewing ontology building tools is to determine the toolkit most suitable for ontology creation, editing, and mind mapping from the view points of information architects who play a significant role in designing knowledge management systems. The paper also gives a fundamental understanding of ontology tools available on the market as open source products as well as commercial products in terms of their capability, availability, enhancement and further development.

Taking Affect into Account: Advances in Affect Sensitive E-Learning

Abdolhossein Sarrafzadeh, Massey University, New Zealand; Jamshid Shanbehzadeh, Tarbiat Moalem University, Iran (Islamic Republic Of); Chris Messom, Massey University, New Zealand; Hamid Gholamhosseini, Auckland University of Technology, New Zealand; Martin Johnson, Massey University, New Zealand

Many software systems would significantly improve performance if they could adapt to the emotional state of the user, for example if e-learning and electronic commerce systems, ATM's and ticketing machines could recognise when users were confused, frustrated or angry they could adapt their interaction so improving their performance. E-learning would be significantly enhanced if computers could adapt to the emotions of learners. This paper presents an Affect Sensitive System used for teaching mathematics. The system detects student emotion, adapts to students and displays emotion via a lifelike

agent. Based on an observational study of human teachers, a case-based method was developed and used to guide the adaptations to student states. This paper presents the system developed and the implications of the findings for e-learning.

An online support tool for post-secondary perseverance : S@MI-Perseverance

Louise Sauvé, Télé-université / SAVIE, Canada; Virginie Martel, Université du Québec à Rimouski, Campus de Lévis, Canada; Godelieve Debeurme, Université de Sherbrooke, Canada; Alan Wright, University of Windsor, Canada

Who are the students abandoning post-secondary studies? What variables predict their dropping out? What measures should be put into place to help prevent students from dropping out ? What online perseverance support tools are used by undergraduate students experiencing their first session of university studies? Our research team, subsidized by the Fonds Québécois de recherche sur la Société et la Culture (FQRSC) and the Inukshuk Funds tried to answer all these questions by putting in place what is called SAMI-Persévérance (Système d'Aide Multimédia Interactif à la PERSÉVÉRANCE aux études postsecondaires). Our session aims to briefly introduce you to our Web environment (http://perseverance.savie.ca) and its extensive index of more than 600 support tools for enhancing student perseverance. We will also present some of the most significant results of the research that took place during the 2006 fall semester at three Québec universities.

ABRACADABRA: A flexible web based literacy software for young readers

Robert Savage, The Center for the Study of Learning and Performance/McGill University, Canada

ABRACADABRA (ABRA) is a literacy instruction tool which has been shown to have positive effects on several critical areas of reading development with both pre-readers and those readers who have been deemed 'at-risk. ABRA, is a highly interactive web-based software designed to advance and reinforce early literacy skills in alphabetics, fluency, reading comprehension and writing. Using state of the art instructional and graphic design, ABRACADABRA's activities address all areas of literacy development from grapheme/phoneme recognition to complex comprehension skills based on the best evidence to date in reading acquisition. It is systematic and sequential in its approach, yet allows flexibility for its use in the classroom. Additional modules for professional development, assessment and communication are also part of creating a comprehensive tool that teachers can use to integrate evidence-based technology into their classrooms.

ABRACADABRA: Progress in the development, Implementation and effectiveness of a web-based literacy resource

Robert Savage, McGill University, Canada; Philip Abrami, Concordia University, Canada

ABRACADABRA, A Balanced Reading Approach for Canadians Designed to Achieve Best Results for All (http://grover.concordia.ca/ABRA/php2006/ abracadabra.html), is a reading intervention being developed by the Centre for the Study of Learning and Performance (CSLP). This website implements a scientifically based balanced reading curriculum in a digital environment. Research on ABRACADABRA conducted to date (Abrami et al., in press: Savage et al., in preparation) have used two extended randomized controlled trials and carefully monitored implementations by trained facilitators to study the impact of the tool on student learning. The effects of these interventions have been positive. We also describe recent research with the active involvement of teachers using ABRACADABRA. We conclude that ultimately, ABRACADABRA has the potential to act as a model for best practices in teaching reading.

Critical Thinking in a Collaborative Online Multimedia PBL Simulation

Robyn Schell, David Kaufman, Simon Fraser University, Canada

Collaborative Online Multimedia Problem Based Learning Simulation (COMPS) is a prototype designed for teaching and learning in a collaborative online problem-based learning environment. Collaborative learning is an integral part of the problem-based learning process (PBL). In COMPS, students can collaborate with one another through a variety of technologies and refer to multimedia resources in order to resolve the clinical scenarios presented to them online. This paper describes the principles behind this model and our research investigating its ability to support learning and teaching in a distributed PBL setting.

Report on a Longitudinal Study – 2004 to 2007: Synchronous or Asynchronous Course Elements? Why Choose? Use Both!

Michael Scheuermann, Drexel University, USA

Two years ago, a predecessor paper discussed the possibilities that course management systems bring while faculty workload tends to increase. This updated report on this longitudinal study demonstrates, with corresponding data, that some strategies can help in balancing quality and workload. Asynchronous tools are the features of choice, but, incorporating synchronous elements might bring about unanticipated responses, outcomes, and opportunities. This updated report-out will highlight several myths on synchronous course elements, share them, discuss them, and, ultimately, dispel them.

The Shrinking Classroom: Serving Unexpected Populations in Higher-Education E-Learning Environments

Steven Schmidt, Jeremy Dickerson, Elizabeth Hodge, Maureen Ellis, East Carolina University, USA

This presentation discusses the effects of an institution of higher education which has transitioned from a large public face-to-face university to an organization which has become a national leader in online education. East Carolina University is a large public university in North Carolina, USA, and is the designated flag-ship for e-learning in the state of North Carolina. Like ECU, many traditional universities are attempting to redesign themselves using an e-learning framework, but surprising student populations can create unexpected growth and planning issues. During this presentation, issues concerning planning, facilities, curriculum, policy, and organizational culture are addressed along with suggested strategies for solutions from ECU's fifteen-year long dedication to e-learning. This presentation would be useful for higher education organizations in the process of building and growing an e-learning program.

Converting Content to Reusable Learning Objects Adaptable to User Preferences and Infrastructure

Jeanne Schreurs, Hasselt university, Belgium; Abdullah Y. Al-Zoubi, Princess Sumaya University for Technology,, Jordan

e-SCHEMA, generating e-MINDMAPS, does not guarantee the reusability of the learning content, nor the interopera-bility of the MINDMAP course modules. A new solution based on the "conceptual model of content object" was developed by decomposing the learning content into small chunks, placed in a hierarchic structure of units and blocks. The raw content components, being the atomic learning objects (ALO), were linked to them. All the content components have been put in the database. We developed a system assembling the source content components into a learning object (LO), taking into account the requirements set by the international standards. An object-class diagram and system architecture and a first prototype was developed. As a result, the learning content is becoming re-usable. First, based on the same source content the user can make a selection of blocks, second more LOs are using the same content in another layout fitting the users preference, and the third option is similar to the second but fitting the device of the user.

REPLAY: From video archive to podcast portal to multimedia repository. Developing audiovisual recordings for collaborative and customized e-learning

Olaf A. Schulte, ETH Zürich, Switzerland

With the intellectual benefit of storing recorded lectures in traditional repositories being limited and their actual usage remaining ephemeral, ETH Zürich has started to explore options beyond the conventional approach together with a number of European partners. Combining automated and isochronous metadata annotation with collaborative tagging and ontology-based search patterns, a knowledge pool of intelligent e-learning objects is planned that will open recordings to serve in a customized and collaborative e-learning environment.

Gender Differences in the Informal Email Communications of Japanese Young People

Douglass J. Scott, Waseda University, Japan; Yuuki Kato, Tokyo University of Social Welfare, Japan; Shogo Kato, Waseda University, Japan, Japan

While there is research on gender differences in written communications, little work has been done to compare how these difference are expressed in various cultures. This study, based on work by Colley, et al, seeks to address this gap by studying the informal email communications of Japanese young people. 42 first year students (19 men, 23 women) at a large, private university in Tokyo were asked to recommend a restaurant to a friend in the form of a cellular telephone email message. Preliminary data show that gender differences exist in the Japanese sample, with women using graphical accents more than three times more on average than their male counterparts. Initial analysis indicates that the Japanese women's use of these marks may be different than Colley et al's sample. However, additional analysis is necessary to more fully compare the deeper elements of style and content of the two samples.

From eLearning team to community of practice: Why, how and what's the benefits?

Philippa Seaton, Michael Sobek, Griffith University, Australia

There is no shortage of innovation in eLearning. Committed educators globally are developing individual courses to meet the needs of students and particular subject matter. However, the more challenging task is to sustain, maintain and spread these innovative ways of teaching across whole programs, entire schools, and the large institutions that characterise higher learning. This presentation shares the strategies and experiences of an Australian multi-campus School of Nursing and Midwifery that has implemented a blended learning approach across its entire undergraduate nursing program. Bringing together an eLearning coordinator, academics, expert clinicians, an educational designer, AV specialists, programmers, and graphic and multimedia designers has enabled us to not only produce quality, integrated learning resources across the curriculum, but to sustain and enhance our eLearning initiatives by developing a community of practice.

Preparing the next generation: Flexible delivery of clinically relevant health professional education

Philippa Seaton, Michael Sobek, Griffith University, Australia

Increasingly eLearning, and multimedia resources are blending with other forms of clinical education to provide experiences that maximise both foundational learning for Health Professionals, and learning-readiness for the application of this knowledge in clinical areas. Academics within the School of Nursing and Midwifery work with a health-focused team of flexible delivery specialists to develop resources for a diverse student group. Best practice instructional design, experienced clinical practitioners, and the latest technology have allowed the school to bridge the gap. This presentation will showcase a range of eLearning activities developed for an undergraduate curriculum delivered in a multi-campus environment. A commitment to using technology such as targeted audio and video, 3D animation, and interactive flash programming to support pedagogy, provides an opportunity to deliver high quality learning activities.

Study Groups in World Language Pedagogy: Using Two-Way Video to Provide Professional Development Across Wyoming

Julie Sellers, Wyoming Department of Education, USA

The Wyoming Equality Network (WEN) offers many possibilities for professional development for educators through two-way video connectivity. One such opportunity is Study Groups in World Language Pedagogy offered by the Wyoming Department of Education over the WEN. In addition to encouraging active discussion and reflection, these groups offer mutual support and encouragement for language teachers in grades K-12 who often are the only educators in their field within many of Wyoming's small schools and districts. This paper will discuss the design of these study groups, their delivery over the WEN Video, and participants' expressed experiences in the groups. Practical suggestions for developing and implementing this type of adult professional development will also be offered.

Pre-Service Teacher Technology Training for English Language Learners: Critical Pedagogy for a Fast Growing Student Population

George Semich, Lorie Brown, Robert Morris University, USA

Abstract: English language learners (ELL) have been one of the fastest growing populations in today's classrooms. These student learners will soon enter the workforce. But, will they be prepared to meet the technology demands of the future? As former Secretary of Education, Ron Paige (Denver, CO-Tour Stop 15, 2002) argued, "By harnessing technology, we can expand access to learning and close the achievement gap in America." It will be the job of today's preservice teachers to close this gap and engage ELL learners by truly integrating technology into classroom learning.

Assistive Technology and the Education Super Freeway: Don't Let Your Students with Disabilities Miss the Ride

Soonhwa Seok, University of Kansas, USA; Michael Fitzpatric, University of New Mexico, USA

Over the last 15 years technology has had a significant impact on educating students with disabilities. Although technology has immense potential to enhance the lives of those with disabilities, there is much room for expansion of technology use with some populations. The 1997 amendments of IDEA established new criteria and guidelines for consideration of assistive technology within the IEP for students with disabilities. IN addition, IDEA has lead to greater access to the general curriculum thus creating opportunities and challenges in the field of general and special education. This article provides the reader with a summary of (a) the current issues in the field of special education technology, (b) a brief legal perspective, (c) discussion of access to the general curriculum, and (d) current challenges preservice and practicing teacher face.

'Activating' Your Students: Synergising A Constructivist And Obe Approach In Online Learning Environments

Moeketsi Sesemane, University of South Africa, South Africa

This paper argues reports on an overview of constructivism and its relationship to outcomes-based education (OBE) in Web-based learning environments. The focal point is to indicate how the constructivist approach influenced the learner's experiential learning to construct and represent knowledge by applying the principles of constructivism in a hypermedia-based learning environment to achieve the learning outcomes of a specific learning intervention. The findings reveal that learners were highly motivated and curious to utilise ICT tools to construct and make meanings for lifelong learning. Learners with more refined web-based learning skills managed to complete their projects. However lifelong learning impacts on South African National Skills Act, whereby major changes experienced in skills development in the labour sector.Changes occurred as the result of Work Integrated Learning (WIL). Key terms: constructivism; Information Communication Technology; OBE

System Development Lifecycle Model for Building PoSTech: a Personalised Search Tool for Teachers' online searching (research in progress)

Faezeh Seyedarabi, London Knowledge Lab, Institute of Education, London, UK, UK

In this paper users' online searching problems were discussed with in the context of teachers' online searching needs and preferences from which the development of a personalised search tool called PoSTech (Personalised Search Tool for Teachers) was suggested as a possible solution to teachers' current online searching problems. Finally, a system development lifecycle model was devised for PoSTech, using the 'Evolutionary Prototype' lifecycle model and 'User-Centered Design' in order to design and develop the personalised search tool for teachers. This lifecycle model could also be used by system developers to design and develop other personalise search tools for their end-users.

Observing Change in Learner Attitudes and Group Dynamics through the Contextualization of Mathematics Instruction

Kamran Shaikh, Rana Tamim, Robert Bernard, Concordia University, Canada

The inherent purpose of this qualitative pilot study was to investigate the impact of a sports-fantasy, management-based educational game on low motivated, low-achieving learners (N = 6) in a predominantly black community. Of particular interest were learners' attitude change and applicability of learned mathematics skills through a systematic analysis of group and individual interactions. The game was designed with the social collaborative approach within an empowering context for the participants involved, namely the basketball setting. Through a practical action-research design, the principal investigator gathered substantial data, including among others, observational logs, videotapes of students' collaborative activities, and pre-task post-task interviews. Data were used to gain insight regarding attitude changes and refine the developed methodologies for the consequent administration of the project with a larger more diverse sample in the future.

Strategies for Developing Active, Learner-Centered Online Education for the Health Sciences

Janet Shanedling, University of Minnesota, USA

Our instructional design team, working with Allied Health, Dentistry, Medicine, and Nursing faculty in the role of 'content experts,' has developed innovative online courses in response to preferences and needs of 21st century learners at the University of Minnesota. We strive to address the learning and social needs of health professions students during their basic sciences and clinical years, particularly rotations in more isolated, rural areas. This presentation will provide online examples of courses for students in a rural physician program, a capstone nursing administration course, occupational therapy, clinical laboratory science, surgical residencies, and dentistry rotations. We will provide examples of how we employ standard educational software such as a portal, WebVista and Moodle, Adobe Connect, Flash, as well as sound instructional design and development techniques to meet both the individual and interprofessional needs of the various health science disciplines.

Designing Innovative Student-Centered Curriculum in e-Learning

Michael Shaw, Laurel Silk, SilkWeb Consulting and Development, USA

Designing curriculum for e-learning requires a systemic approach that encompasses the broader view of the learning environment and consideration of the needs of the learner. Implementing a student-centered approach is a key to successful

curriculum development. The continuing challenge for curriculum designers is that of engaging students in new learning activities that are goal-oriented, personally meaningful, relevant, and reflective in nature. These learning activities must be centered on achieving the program's goals but also have potential to give birth to new learning opportunities. E-learning environments can be viewed as evolving planes by which learners realize their own potential in an active, collaborative setting. As such, curriculum designers must give learners the best opportunity to achieve the desired learning outcomes and design activities that value diversity of perspectives and provide substantial opportunities for collaborative or partnership learning.

Educational Research and Evaluation Data Collection Procedures in Second Life

Greg Sherman, Richard Tillies, Radford University, USA

This paper describes different methods currently available to obtain and export metric data from Second Life to an external database or webpage for subsequent analysis. Examples of Second Life metric data useful in research and evaluation includes the amount of time spent in specific regions, the materials and objects selected and viewed, the nature of interaction with other avatars, and the location of avatars before and after navigating to the defined space. Currently-available methods are presented in the following categories: use of existing Second Life data collection objects and services, use of existing screen capture software, use of third party web metric software, and the programming of customized data collection procedure using Second Life's proprietary XML-based scripting language. Additionally, this paper presents methods used at Radford University to obtain Second Life data for specific research and evaluation projects.

Development and Evaluation of a System to Support Online Individual Learning using Streaming Video

Junji Shibasaki, National Institute of Multimedia Education, Japan

The author has developed interactive streaming REAS, a system which adds new features—such as interactive functions for achieving individualization of online learning by delivering different streaming video in response to the needs and learning status of the learner—to streaming REAS which has mechanisms for measuring learning status, class effectiveness and evaluation by the learner during streaming video viewing. This paper describes the newly developed functions, and the authoring method. Evaluation of online learning using interactive streaming REAS was also done. The results showed that online learning using interactive streaming REAS was evaluated more highly by learners than online learning using ordinary, conventional streaming video.

Design Issues for Videoconferencing in Earth and Life Sciences: The Case of the Agricultural University of Athens

Alexander Sideridis, George Papadopoulos, Iro Voulgari, Eleni Houssou, Agricultural University of Athens, Greece

Abstract: In Earth and Life Science courses such as agricultural, environmental and biomedical courses teaching and learning conditions and requirements present certain peculiarities. In this paper, the case of the Agricultural University of Athens (AUA) is presented, in relation to the use of videoconferencing for instruction and learning. AUA is participating in a still running project, aiming to design and implement educational scenarios for the instruction of specific courses exploiting videoconferencing technology. It is hoped that with the use of this technology challenges related to particularities and special requirements of a university of this kind will be successfully answered. The methodology and the instructional design principles employed for the development of the educational scenarios as well as the experience gained, the obstacles encountered and the solutions proposed are outlined and discussed.

Instructional Design: Methodologies, Communication, Affectivity and Learning

George França, Liliam Silva, Paulo Vasconcelos, Luciana Santos, Universidade Anhembi Morumbi, Brazil

Abstract: The present article discusses aspects of experience and perceptions of online mediation, with focus on the superior education and its particularities. It discusses the need of distance education methodologies, establishing relations between communicational and technological aspects involved in the teaching-learning process. It thus has the intention of discussing issues related to learning, passing through perceptions and methodologies, problematization of elements which compose the idea of knowledge building, didactics and scenarios of communication and learning processes, for, at last, going deep into the affective relations of online and distance communication.

Low Cost Synchronous Communication Environment for Distant Architectural Education: A viability and effectiveness study

Neander Silva, Ecilamar Lima, Universidade de Brasilia, Brazil

We compare three teaching experiences of supervising and discussing architectural design projects developed to extending access to students living in different states of Brazil and to test whether the quality of teaching deliverance at distance was at least the same as on site. The first one was carried out through on site teaching. The second experience was developed through a low cost real time collaboration system, RTCS, based on a hosted service. The third experience involved developing the same activities through a low cost RTCS based on dedicated server. The results shows, particularly the third experience, that the distant architectural education is viable an effective.

A User Interface Design Rubric for Evaluating E-Learning Applications

Maria Sagrario Simbulan, University of the Philippines, Philippines

How critical is the role of the user interface in E-Learning? Simply put, the best-designed content will be useless without an equally well-designed user interface that will attract the learner's attention, retain the learner's interest, and allow the learner to interact with the content such that learning can take place. This paper presents a rubric that will help assess a user interface's contribution to the efficiency and effectiveness of an E-Learning application. The rubric focuses on the elements and attributes that comprise the user interface's visual design and dialogue design. A discussion on the user interface and the

functions it performs in E-Learning applications serves as an introduction to the presentation of the user interface design rubric.

The Echo of Instructional Design Principles within a Corporation: Moving Towards Practice Supported by Theory

Antonio Sistelos, Susan Powers, Robert English, Indiana State University, USA

The task of redesigning instruction or designing it for online environments within a corporation faces challenges that may interfere with the final e-product, which is intended to be the expression of the most perfect balance between theory and practice – the e-learning environment. These constraints are usually related to time, finances, and competition. Initially "holding our horses and later letting them go" was the strategy chosen which was based upon principles of instructional design with the intent of ensuring the quality of delivery instruction and meaningfulness in learning. The accomplished results of acting according to a sound theoretical framework have in turn positively affected the dynamics of the entire instructional design process, making development of the e-learning product a corporative learning experience.

Improving Learning from Web-Based Training Courses: Research Evidence

Traci Sitzmann, Advanced Distributed Learning Co-Laboratory, USA

This two-part presentation will empirically summarize research on the effectiveness of web-based instruction and present a no-cost intervention that can be incorporated in online courses to improve learning outcomes. The first part will cover a statistical summary of the literature from 168 training courses and 19,331 trainees to compare the effectiveness of web-based and classroom instruction. This will provide baseline evidence of the relative effectiveness of the delivery media for teaching factual and skill-based knowledge. The second part will discuss prompting self-regulation, an intervention that can be incorporated in web-based training to improve learning outcomes. Examples of the self-regulation prompts will be provided for conference attendees so they can incorporate the prompts in their web-based training courses and implications for practice will be discussed.

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Innovation in e-Assessment: Exploring a Multidimensional Tool

Rosemary Skeele, Vivienne Carr, Joseph Martinelli, Nancy Sardone, Seton Hall University, USA

Blackboard is our university's management system for online course delivery. To simplify data collection and aggregation for various accreditation reports, we have researched various online tools that can be accessed through Blackboard. We were excited to discover a multidimensional, rubric-based tool called Waypoint that allows us to provide detailed evaluation feedback to students about specific assignments while at the same time permits us to construct rubrics, align objectives with professional standards and core curriculum standards, collect and aggregate data for accreditation reporting, and design assessments for the acquisition of core curriculum skills by all undergraduate students at the university. These are our reflections after using this tool for the past year.

Blackboard tool usage across different disciplines: interaction and transactional distance

Glenn Smith, Ana Torres-Ayala, University of South Florida, USA

This proposed study examined which Blackboard tools online instructors from four different discipline quadrants (hard-pure, hard-applied, soft-pure, soft-applied) actually used in their classes, and further, what this implied about differences in transactional distance across discipline. The authors analyzed the choice of tools used by courses in the four different academic quadrants, through automated logs from Blackboard at a large enrollment major university. Preliminary data suggests large differences in tool usage and instructor satisfaction, particularly between hard-pure (mathematics–related) versus other disciplines.

Improving the Interactive Course Web User Interface

Clinton Smullen, Stephanie Smullen, University of Tennessee at Chattanooga, USA

AJAX web applications are proliferating. AJAX is designed to provide smoother interactivity and more responsiveness in web systems, and a web user experience closer to that of a desktop application. Students will naturally come to expect that their courseware applications will respond as quickly. Course site designers and course developers need to be aware of the advantages and disadvantages of the AJAX technology so that they can make effective use of this technology. This report addresses issues in the areas of user interface, web culture, design, software engineering, performance, and security. Awareness of these issues allows course designers and developers to more effectively utilize AJAX in educational courseware. Future developments and areas of research needed to use AJAX technology are indicated.

Metaphors of Interactivity

Sarah Sniderman, Silverspaces, Canada

The most effective educational messages reflect key principles of information, interface and interactivity design. Interactivity in particular is a critical strategy for engaging learners, but it is most often considered from a single dominant

perspective: interactivity as conversation. Since a metaphor necessarily highlights certain features of a concept while obscuring others, multiple metaphors can promote a richer understanding. Games, both video and computer-based, are excellent sources of inspiration about the nature and potential of interactivity. Alternative metaphors, such as interactivity as adaptation or interactivity as construction, can provide us with a broader perspective on which to base the design of e-learning programs.

Extending Moodle functionalities to adaptive testing framework

Komi Sodoke, Martin Riopel, Gilles Raîche, CAMRI Lab , Université du Québec à Montréal (UQAM), Canada; Roger Nkambou, GDAC Lab, Canada; Martin Lesage, CAMRI Lab , Université du Québec à Montréal (UQAM), Canada

E-learning has advanced considerably in the last decades allowing the interoperability of different systems and different kinds of adaptation to the student's profile or the learning objectives. But, some of its aspects, such as E-testing are still in an early stage. As a consequence, most of the actual E-learning platforms offer only basic E-testing functionalities. In addition, most of those platforms present the tests in a traditional format despite their known limitations and precision problems. However, by making efficient use of well known techniques in artificial intelligence, existing psychometric theories and standards in E-learning, it could be possible to integrate adaptive and more informative E-testing functionalities in the actual E-learning platforms. In this paper, we will present some of the principles, the architectural elements and the algorithms used in an exploratory integration of adaptive testing functionalities within the Moodle platform.

The Quiet Revolution

Nish Sonwalkar, IDL Systems, Inc., USA

The quest for learning systems that are effective and accommodates individual learning preference is eternal. However, the first generation of online learning with learning management systems, an outgrowth of "internet bubble," has been disappointing. The corridors of research universities are filled with few educational experiments with multimedia and hypermedia that have shown limited promise to become the next generation of online education. The framework is now fondly known in the pedagogical literature as the "Learning Cube" with three dimensions: media, models and interactivity for a holistic learning experience. With cognitive opportunity provided by media, models, interactive activities and intelligent feedback based on the embedded diagnostic testing, we enter into a territory of effective educational delivery model termed as "Adaptive Blended Learning." The adaptive blended learning implements all dimensions of the learning cube with clicks – the online adaptive learning with bricks – the face-to-face interactive learning sessions.

Using Technology to Provide Authentic Learning Experiences in Science

Sean Spear, Western Governors University, USA

This paper presents a unique partnership with The American Museum of Natural History (AMNH) that Western Governors University has developed to provide individualized and authentic experiences through technology for students. AMNH provides online courses for our students with opportunities to deepen their knowledge in various areas of science and social studies. The courses allow students to engage in actual discussions and learning with scientists engaged in cutting edge research. In addition, through synchronous and asynchronous discussion boards, students can collaborate on projects and engage in distance research within their schools. In this presentation we will discuss the need for this partnership, how technology plays a central role, and how they support the development of authentic experiences for education students.

E-Learning on Three Continents--Different and the Same: A Business Perspective

Gary Stairs, Red Hot Learning Inc., Canada

Presented in a travelogue format which mirrors his peripatetic business development initiatives for his company and the Canadian e-learning industry, Gary's remarks will focus on the overall business and marketing aspects of e-learning in North America, Europe and Africa. His insights are drawn from leading industry analysts, observations from serving international and domestic clients and markets and participation in numerous conferences and trade missions. He will comment on what's different, and the same in these markets: who's selling and who's buying, what they are buying (both time-proven and emerging media) and who's using learning technologies.

Along the way, he'll touch on some of the leading brands in the marketplaces, talk about market access and penetrability and comment on the role of governments as strategic proponents, investors and consumers of e-learning. Where possible, he will speculate on emerging common trends in the markets and speak specifically about e-learning in the international development context with all of its attendant financial and technological challenges. Finally, his remarks will conclude with perspectives about Canada's potential opportunities in Europe and Africa, and with some thoughts on the imperatives of international and intercontinental collaboration.

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Canada's potential opportunities in Europe and Africa, and with some thoughts on the imperatives of international and intercontinental collaboration.

Integrating Social Software into Course Design and Tracking Student Engagement: Early Results and Research Perspectives

Karen Stepanyan, Brunel University / Buckinghamshire Chilterns University College, UK; Richard Mather, Janet Payne, Buckinghamshire Chilterns University College, UK

The uptake of social software is becoming more widespread in many sectors of education and organizational development. However, there is little empirical research on the impacts of adopting these technologies, and so it is difficult to determine appropriate pedagogic models and whether or not the desired learning outcomes are being realized. This paper reports early findings of an ongoing pilot study which is based on the concept of collaborative learning and supported by means of social software. It describes the educational philosophy behind the study and the teaching techniques used. The application of various features of social software, including blogs, file management and personalization, are discussed, as well as the different techniques for facilitating and measuring the level of student engagement with social software. The results indicate that student engagement with social software can be shaped by course design and activities that integrate educational technology into the course structure.

The Online Executive Leadership Certificate Program in Urban Higher Education

Joseph Martin Stevenson, Jeton McClinton, Jackson State University, USA

This paper addresses the concept of e-learning applied to an existing Executive PhD program in Urban Leadership at a Historically Black University in southern United States. The program is designed with a specific focus on the role of leadership development with an emphasis on issues related to Minority Serving Institutions (MSIs). This is the first executive leadership certificate program of its kind in the nation offered in a distance learning mode. Online educational opportunities are becoming increasingly abundant as institutions invest heavily in Web-based delivery systems to promote lifelong learning opportunities and sharpen their competitive edge.

Designing a Virtual Olympic Games Framework for Online Communities

Dorian Stoilescu, Fernando Oliveira, Aleisha Howlett, George Mcleod, Naxin Zhao, OISE/University of Toronto, Canada

This paper provides some details about a project designed by a group of graduate students from OISE, University of Toronto. Using Web 2.0 technologies, we designed a project able to provide support in performing various sports redesigned for online communities. This involves designing and building an online environment and also future investigations about how it is possible to help some of the existing computer technologies (such as gaming consoles, exercise equipment with computer interfaces, devices of measuring health, speed, force and distance, and Web 2.0 interfaces) to allow people to compete in various sports across great distances through the Internet. As a starting model we considered a Stationary Bike Setup offering users information about their individual health and performance. There are diverse potential fields where this project can be used: theories of learning, technologies, cybercultural studies, fitness, sports and nutrition. This paper only discusses the initial design and future directions.

Modalities of Using Learning Objects for Intelligent Agents

Dorian Stoilescu, OISE/University of Toronto, Canada

This survey investigates how e-learning systems use Learning Objects and how they are designed using multi-agent strategies to explore opportunities to improve teaching performance. The paper shows the functionality of different intelligent tutorial systems based on Learning Objects (LOs). Readapting LOs might constitute a foundation for large scale collaboration in education between different organizations. In order not only to have efficient and automate processing of LOs but also efficient social interactions and collaborative learning, Intelligent Agents (IAs) have been highly recommended by a number of researchers. This survey investigates how these e-learning systems are designed, how student differences are explored, and, also, how are able to improve teaching performance.

'Awareness Campaign': A Necessity for the Adoption of E-Learning at a HEI in South Africa

Juliet Stoltenkamp, Carolynne Kies, Kobus Smit, University of the Western Cape, South Africa

E-Learning is increasingly being used in Higher Education Institutions (HEIs) in South Africa, challenging them to meet users' expectations of high-quality face-to-face contact integrated with online learning.However there are many factors that may influence the success of e-learning initiatives.One of these may be the amount of awareness of initiatives and related factors. This paper reports on the implementation of e-Learning in a HEI in South Africa with special focus on the 'Awareness Campaign'and its impact on the project.The authors briefly reflect on the situation prior to the Awareness Campaign.The different focus areas of the campaign are then presented.These can be categorized as the establishment of a support structure, marketing initiatives, consultative forums and flagship E-Learning projects.In conclusion the paper offers recommendations for HEIs to consider the commitment to an Awareness Campaign whilst implementing E-Learning.Keywords: e-learning awareness; e-learning implementation; e-learning support; training, marketing; consultative forums

Distributed Learning: A Psychology of Social Computing

Johannes Strobel, Purdue University, USA

Through the wide-spread use of social computing tools like blogs and wikis we experience a dramatic increase of collaborative writing activity on the web, and developments towards distributed forms of learning. This paper sheds light on the cognitive and socio-cognitive ramifactions of the distributed writing phenomenon on the web, especially arguing that blogging fosters a new form of literacy, demands different cognitive processes of learners, and produces its own community of learning.

Problem-based learning: For what learning outcomes is it working?

Johannes Strobel, Purdue University, USA; Angela Van Barneveld, Concordia University, Canada

Problem-based learning (PBL) is being utilized since 40 years in a variety of different disciplines. Though extensively researched, there is heated debate about the effectiveness of PBL. This study utilizes qualitative meta-synthesis strategies to compare and contrast the design, assumptions, and findings of these meta-analyses research. Findings indicate that PBL is superior when it comes to long-term retention, skill development and satisfaction of students and teachers, while traditional approaches are slightly more effective for short-term retention as measured by standardized board exams. Implications will be discussed.

The influence of blogging, a social computing activity, on the conceptual development and epistemological beliefs of students in and outside of university environments.

Johannes Strobel, Marci Araki, Leona Patlik, Concordia University, Canada

Students are using social computing tools like blogging, with their friends and in public spaces on the Internet. The processes, discourses, and truth claims experienced by using the tools are part of their overall learning experience and shape their practice in school, their conceptual development, and their epistemological beliefs. When people blog, they create diary-like hypertexts discussing and cross-referencing their entries with similar topics on the web. This project explored the processes of theory/model building, the discourse structures, and truth claims students experience in their social computing experience. Research shows that students experience their blogging qualitatively differently than discussions at school and that emotionally close concepts are less likely to change over time.

Improving College Classes using Mobile Phones and QR Codes

Hitoshi Susono, Tsutomu Shimomura, Mie University, Japan

Our college students have begun using their mobile phones recently to send some comments in our classes. In Japan more and more young people have a mobile phone with a QR code scanner. The QR code makes it easier for the students to access a web forum for communication with the classmates instead of typing a long web address (URL). Moreover using the QR code and mobile phones also allows the teacher to conduct surveys for improving his/her class during classes. In this research we have developed a system that allows college students to answer a question concerning the class and send some comments to the teacher as well as classmates using mobile phones and QR codes in the middle of each class.

Enhancing Student Learning Using Multimedia

Julia Sweitzer, Lake-Sumter Community College, USA

Today's students are exposed to so much interactive multimedia that using a virtual learning environment has become an expectation. To meet students' expectations, more instructors are providing online resources for students in both online and traditional classes. These resources aid the student in learning the material while providing a source of "entertainment" through a hands-on approach. As an instructor, what can we do to take advantage of the effect that video games have on our students? The presenter will demonstrate how she uses various multimedia approaches to teach students in her business classes as well as bring excitement to the material while enhancing student learning. There is an abundance of free resources available online that instructors can use to enhance learning for all types of learners – the visual, the auditory and the tactile/kinesthetic.

Instructors Or Publishers Can Create Customized Web Categories Using Zenome

Zsolt Szigetvari, Zenome.com, Canada

Zenome can create unique categories in our web directory for anyone's course or related textbook. All instructors or publishers need to do is provide your course topics, or the title of your textbooks – we then produce a customized category for you. Your category becomes an expandable 'bookshelf' of web sites designed specifically for your course or textbook. We maintain categories to ensure that there are no dead links; and all technical questions are handled by our help desk. Zenome.com was developed by two Concordia University instructors. As teachers, we also provide customized assignments to help students research, evaluate, and share web resources. (Zenome.com > Academic Resources). Zenome's tools can also be added as a power-link to any Learning Management System (LMS). There is never a cost or commitment to use Zenome. Sample Community: Educational Technology. Zenome.com > Education + Reference > Educational Technology. For personalized assistance, email: Academics@Zenome.com.

Zenome – A Tool for Sharing Online Learning Resources

Zsolt Szigetvari, Concordia University, Canada

ZENOME – A TOOL FOR SHARING ONLINE LEARNING RESOURCES: Zenome.com is a self-organizing social network directory that fosters academic exchange. This seminar presents a technology designed to allow teachers to quickly and easily index their own research; index relevant course resources; join or create threaded discussions within a learning community; create new sub-communities; and, access RSS feeds. Developed by two instructors from Concordia University, it was designed to meet the particular needs of teachers. Many teachers have their own web sites and lists of relevant links. Unfortunately, a great deal of time and attention is required to maintain these URLs. Zenome's technology manages teachers' links to ensure they stay current. Zenome can be added as one URL to any course web page or Learning Management System – making a teacher's customized resources available with just one click. There is no cost or commitment for anyone to use or share any of the resources.

Agent to Agent communication scheme for collarborative e-Learning

Han Tae In, Kim Young In, Korean German Industrial Park(KGIP), Korea (South)

Abstract : Agent has one of the most important functions in e-learning, so its technology is developed vibrantly and fast in information technology. Under collaborative e-learning environment, agent is able to act independent functionality by

common process, regardless condition, framework or subject. The A2A Communication denotes information technology which agents communicate each other over online learning, online education and online training. The goal of research is look into many agent framework which support collaborative e-learning and set out data model that follow rule of A2A communication. It analyzes various interaction A2A communication for collaborative e-learning environment. In addition, it design most suitable data model.

An Analysis of a Keyword Network Structure in Online-Discussion in E-Learning Courses

Takahiro Tagawa, Kyushu University, Japan; Koichi Yasutake, Hirosima University, Japan; Osamu Yamakawa, Fukui Prefectural University, Japan; Hitoshi Inoue, Kyushu University, Japan; Takahiro Sumiya, Hiroshima University, Japan

The purpose of this paper is to investigate the structural characteristics of networks formed by co-occurrence of keywords in each message in discussion on bulletin board system used in e-learning courses. We call such s network as keyword network. We investigated on three keyword networks extracted from different courses, and we found some interesting structural characteristics, such as Small World structure and tendency of assortative mixing by degree.

A Dedicated Online Java Programming Course: Design, Development, and Assessment

Eiko Takaoka, Wakana Ishii, Chitose Institute of Science and Technology, Japan

We designed and developed Java Programming Online Course Materials and conducted classes in: traditional face-to-face style, blended style and fully e-learning style, from 2004 to 2006. We improved content based on the results of questionnaires and comments from students year by year. In addition, we gave special care for students when we conducted fully e-learning style. Consequently, we gave students the educational equivalent of face-to-face using e-learning. And we found that it is important that guidance and face-to-face sessions should be conducted in a suitable fashion, in addition to well-designed coursework, to achieve fully e-learning successfully.

Operation improvement of time table management system using the spreadsheet

Takeshi Takegami, Masanori Nakamura, Takasaki University of Commerce, Japan; Noriyuki Hasegawa, Yokohama National University, Japan

We have produced the time table management system for university using the macro processing of the spreadsheet in a general personal computer system. This system is able not only to check the contradiction of the time table but also to make the management table concerning the lecturer, the classroom, the lecture subject, and the core class of first semester and latter semester at the same time. Therefore, the integrated management to the time table is possible. However, the input of the schedule data was not systematized, and we had to input the full text characters from the keyboard. As a result, there was a problem that it was not possible to check the data when there were even one character differences in the input data and the registration data for check. In this paper, we report about the time table management system to which the data input operation has been largely improved as the users can select the items from the registration data.

A Method to Evaluate the Performance of the Learner's Structural Knowledge and a Coaching Algorithm for its Bug Modification

Makoto Takeya, Satoshi Tomita, Takushoku University, Japan

It is very important to evaluate the effects of e-learning for individual learners. This poster presents the Logical Flow Test method (LFT) as a measurement tool of structural knowledge. In the LFT, the learner's structural knowledge is described by a Logical Flow Graph (LFG), which can be compared to that of the teacher. First, the authors will present a quantitative evaluation method for structural knowledge in individual learners following e-learning. Second, they will present a modification algorithm for bugs in the learner's structural knowledge in order to assist individual learners. Finally, they will discuss a case study of the LFG assembled for a one-dimensional slider in the Design and Drafting course of our University and show validity for its LFT utilization.

The Relationship of the Urban Virtual Algebra Student's Mathematics Attitude, Motivation, and Perception of Transactional Distance

June Talvitie Siple, University of North Carolina at Chapel Hill, USA

Urban districts have difficulty in attracting and retaining the highly qualified teachers required by NCLB. One possible alternative for urban districts is to meet the academic needs of their students and the requirements of NCLB by implementing or participating in e-learning programs. Whether the use of e-learning programs is an effective alternative in teaching our K-12 population is still under-researched. This is particularly so in relation to the theory and pedagogy underlying virtual high school course offerings. This study investigates the relationship of the urban virtual high school student's mathematics attitude, motivation and perception of transactional distance in a web-based Algebra I course. The study investigates students' perceptions from data gathered through surveys, interviews, and discussion transcripts.

Roadmapping E-Learning at Duke University

Molly Tamarkin, Julian Lombardi, Duke University, USA

Over 2006-2007, IT leaders in Duke's professional schools, library, college, and central computing organization met regularly to develop an e-learning roadmap for the University. The Duke roadmap describes our various e-learning technologies and their anticipated progression over time. In developing the roadmap, various campus constituencies considered e-learning guiding principles, functional and technical system requirements, the effects of the consumer marketplace, the importance of assessment in accreditation and its potential system impact, and our vision for the future of e-learning. The roadmap is intended to be used as a reference as campus constituencies consider implementing new and emerging technologies in support of learning and instruction.

EDyoutube: Why not?

Rana Tamim, Concordia University, Canada; Kamran Shaikh, Edward Bethel, Concordia, Canada

Although it has only been two years since the initiation of the youtube; many have already started referring to the "youtube era". It has had a major impact on many areas including politics, entertainment, and communal standing. The premise of this paper is that educators and instructional designers can make use of youtube within course design for different reasons, including its popularity, low expenses, and variability in potential uses, especially when used innovatively in different contexts. The paper presents an overview of youtube, offers different potential approaches for incorporating youtube related activities in different educational contexts, and addresses general issues related to such approaches.

The Online Chat and the E-mail: Alternative Interview Formats in a Science Teaching Methods Course

Rana Tamim, Kamran Shaikh, Concordia University, Canada; Richard Schmid, Concordia, Canada

In the educational context, anonymity plays a major role when 'power relations' may impact the participants' responses. The current paper presents a pilot study for the design and utilization of an anonymous synchronous chat (ASC) interviewing technique for the collection of data in an educational methods course. After the course was over, and anonymity was not a central factor, two other techniques were offered to overcome accessibility obstacles, namely an e-mail and a face-to-face format. Comparisons were then made regarding the nature and quality of information obtained. Findings reveal that students were most willing to share opinions in the ASC, the face-to-face approach was valued for its social interactive aspect, and the e-mail interview format was selected mainly for its logistic flexibility. Implications regarding quality of data and accessibility are discussed.

Factors Influencing the Implementation of Distance Education Across Taiwan Higher Education

Wee-Kheng Tan, Nick Hsu, Kainan University, Taiwan

This paper examines the factors influencing the implementation of distance education by Taiwan's higher education institutions. Through survey, appropriate theoretical model and hypothesis testing, the study shows that faculty's willingness to participate in distance education is influenced by perception of usefulness of distance education, personal factors, teaching environment and acquaintance with technology skills. Perception of usefulness is in turn influenced by the faculty attitudes. Acquaintance with technology and willingness to participate will push faculty to implement distance education.

University anti-plagiarism efforts versus commercial anti-plagiarism software and services and do online students cheat more?

Michael Tang, Roxanne Byrne, Matthew Tang, University of Colorado at Denver and Health Sciences Center, USA

Since the advent of online education with its new technology academicians have raised the question as to how instructors can keep students from cheating. As a result of this perceived problem, several anti-plagiarism software and services have become available for academic use. This paper evaluates such programs and services, including the German product, Plagiarism-Finder, the freeware, Wcopyfind and the Glatt Plagiarism Detection Service. After examining and evaluating these applications, the authors draw several conclusions concerning efforts to detect cheating among students including a report on the results of a statistical analysis of the degree of plagiarism found between online and regular students.

The Interplay of Student Projects and Student-Faculty Research

Charles Tappert, Pace University, USA

One of the novel approaches we use to support student dissertation and faculty research is to create research-supporting projects in several courses. We teach our dissertation students how to conduct research in a number of areas of computing, and our student project teams how to develop real-world computer information systems. In recent years, we have experimented with the interplay of dissertation research and projects created specifically to develop the supporting infrastructure for that research. We describe 63 research-related projects supervised by the authors over the last six years and their related research with 132 publications.

Creating online qualitative research environments

Diane Tarkowski, Mojdeh Bayat, Debbie Harris, Joe Salwach, DePaul University, USA

Most educators do qualitative research via focus groups, email or paper surveys. However, this is impracticable for some populations especially those with special needs and their families. A DePaul faculty member decided that her research would be better served if the participants could use online chats and surveys rather than the traditional methods. This session will cover how DePaul University's Information Services (IS) and faculty joined together to offer online resources as an alternative to the traditional methods. We will discuss what IS' business case project methodology is, how the business case was created, how we set up the environment for online chats and surveys, and how the data is analyzed.

Information Design for Podcasts

Diane Tarkowski, Maria Avgerinou, Joe Salwach, DePaul University, USA

Few (if any) podcasters have considered information design. Information design is an interdisciplinary field, and comprises studies of technology and processes for the creation and use of information materials. So, in this session, DePaul University faculty will present their findings on how to use information design principles to create podcasts that effectively support and enhance learning and instruction. Information Services staff will discuss how they supported the faculty with hardware and software.

Supporting Faculty and Students with Podcast Workshops

Diane Tarkowski, Joe Salwach, Maria Avgerinou, Marie Donovan, DePaul University, USA

The question for educators is how to use podcasting to enhance student learning. Many institutions are providing automated lectures as podcasts. While DePaul University is also pursuing these types of podcasts, we foresee other uses such as distributing supplemental materials created by faculty and materials created by students or student teachers. So, this session covers how DePaul University's Information Services created and offered podcast workshops to faculty and students. Also,

we will discuss how student teachers developed podcasts to be used by parents and children. Finally, student and faculty podcasts and workshop reactions will be reviewed as well as the setup of podcast rooms.

Integrating New Management Strategies into Traditional Open and Distance Education

Deniz Tasci, Anadolu University, Turkey

Management of the distance programs is one of the crucial challenges that Anadolu University has been facing for sometime. Increasing number of students, rising demand for more interactive and flexible learning opportunities, and advances in communication technologies make this challenge tougher. Experiences revealed that traditional management strategies were not enough to cope with this challenge. Therefore, Anadolu University tries to employ new strategies to be able to manage the design, production and implementation processes of its distance programs. Flexible working hours, crisis management, project-based working, 360o feedback are some of these strategies. This presentation focuses on introducing how Anadolu University employs these strategies.

Digital Scenes of Pedagogical Use Using Learning Objects of the Educational Games Type

Jeane Teixeira, Eveline Sa, Clovis Fernandes, Instituto Tecnológico de Aeronáutica, Brazil

This article examines digital scenes of pedagogical use for the Game Object (GO) - a Learning Object (LO) of the digital game type, with educational characteristics based on the standard for Learning Object Metadata (LOM) standard. Pedagogical contexts related to different types of learning activities are discussed here: Learner's preparation activities, activities for the development of skills and competences, and evaluation activities. For this, a pedagogical model based on the "Digital Games Based Learning" was used. As an example, a scene for use cases of a teacher and an LO repository as actors is described. The importance of this subject is the search for a better visualization of the possible application scenes of the GO. The current work is part of the modeling of intelligent repository of games object that intends to provide games that are adaptable to different pedagogical contexts in Virtual Learning Environments (VLE).

Investigating Factors Affecting Readiness for E-Learning: A Pilot Study from Lecturers' Perspectives

Yin-Leng Theng, Ying Kwong Siaw, Nanyang Technological University, Singapore

In this paper, we describe a survey conducted on a local polytechnic in Singapore to investigate factors affecting lecturers' readiness in the use of educational technologies and tools, learning models or standards, instructional approaches for e-learning. Seventy-two lecturers from seven schools across the polytechnic took part in the survey held over three weeks. Findings show a positive correlation between lecturers' confidence and familiarity with supporting tools in Blackboard and their readiness to adopt e-learning for their courses. The paper concludes with a discussion on recommendations of support for lecturers in the e-learning environments.

Using YouTube in Educational Environments

Frédéric Philipp Thiele, Fachhochschule Kaiserslautern, Germany

The emerging online video portals enjoy great popularity and gain more users than any other onlineservice. Even now, these services change our media landscape and have great influence on the media usage of the internet generation. In this paper we analyse the possibilities for this new technology in e-learning. The presentation shows the media-theoretical background as well as concrete and applied case scenarios, which the participants can put to direct practical use. The media-theoretical backgrounds are proved by an extensive and so far unpublished statistical study from the market leader YouTube. This study is based on our analysis of several million video- and userprofiles. Presented are aspects based on content, technology and demographics. Furthermore several practical case scenarios are presented and evaluated with special examples. The presented examples are not constricted to pure knowledge distribution, but build on aspects of community building and marketing.

Student Moderators in Online Courses

Joan Thormann, Lesley University, USA

Engaging students in substantive discussions in an online course is challenging. The literature suggests many techniques for encouraging participation (Collison et al, 2000; Edwards,2005; Paloff & Pratt, 1999; Stemwedel, 2005). One way to enhance participation may include having students serve as online class moderators (Brescia & Miller, 2005; Murphy et al, 2005; Stemwedel,2005;). This paper will address a study about the role, effectiveness and satisfaction of having student moderators in an online course.

Undergraduate and Graduate Hispanic Student Satisfaction with Online Learning: Results of a Three Year Study.

Ann Thorn, Delmar Community College, USA; Caroline Sherritt, Enrique Solis, Texas A & M Corpus Christi, USA

Abstract: We present results of a three year study that examined whether online delivery of courses is a viable option for two Hispanic Serving Texas Institutions: A community college and public university. Educating Hispanics is a critical national priority, yet Hispanics, representing 20 different nationalities, are the least educated major minority in the U.S., with barely ten percent in the 25-29 age range holding a bachelor's degree (U. S. Dept. Education, 2006). This investigation looked at the perceived satisfaction of Latino undergraduate college and university graduate students with online learning, thus examining whether online learning, the fastest growing distance delivery method, can provide greater education access to the fastest growing U. S. minority.

ADDID : a model for processing the learning reform using computer technology

Monchai Tiantong, KMITNB, Thailand

The purpose of this study was to synthesize a model for processing the learning reform using computer technology. This model indicated the relationship of processes for developing activities under the learner-centered activities. The synthesis of the model processes consists of 5 steps : (1) Literature reviewed from related papers, (2) Interviews of 27 related experts

who are the experts in education, learning reform, and computer instruction, (3) Defining a framework and drafting a model, (4) Surveys of the opinions of 12 related experts to validate the drafted model, and (5) Revision the model according to experts' opinions and conclusions. The findings of this study are called "ADDID", which consists of 5 steps : A : Analysis for surveying the problems and the requirements, D : Design the learning activities, D : Development of learning instrument being used with computer, I : Implementation, and D : Documentation. This study concluded that the ADDID model can be used to properly guide the education reform according to the National Education Act of 1999 of Thailand.

Learning Styles and Cognition Levels in Asynchronous Discussions

Abdullah Topcu, Bogazici University, Turkey; Deniz Palak, NYIT, USA

Asynchronous online discussions are increasingly used to supplement face-to-face course delivery mode to maximize student engagement, collaboration, and overall learning. This study was conducted to describe the relationship between student learning styles and their cognition in a web-enhanced undergraduate mathematics methods teaching course to offer possible solutions for enhancing cohesive student interaction in asynchronous course environments. Within a mixed-method research design, we examined the variations in student learning styles using Kolb's Learning Style Inventory and student cognition levels based on the messages students posted in the course asynchronous discussion forums. The study findings indicate that student learning style alone does not predict the variations in the student cognitive levels. Instead, learning style in combination with academic achievement significantly predict the cognitive levels of students reflected by the messages posted in the course online asynchronous discussions

Pocketsnips: Ubiquitous as YouTube but with Cutting Edge Quality – Creating Useful Videos for Teaching Medical Procedures

David Topps, NOSM, Canada; Joyce Helmer, Cambrian College, Canada; Richard Witham, NOSM, Canada; Lorraine Carter, Laurentian University School of Nursing, Canada

Teaching videos tend to be dry, didactic and detailed. Much costly time is wasted capturing 'talking heads' and describing material which is just as easily understood from a textbook. By concentrating on the essential kinetic elements of procedures, and combining these with sophisticated digital video, compression and streaming techniques, we have optimized our production and publication methods for a wide variety of users and situations. Broad collaboration has enhanced the breadth and depth of content available, while controlling costs and ensuring quality, safety and standardization. By condensing the dynamic elements of clinical skills and procedures into very short video clips for teaching and refresher purposes, we make these accessible at the point-of-care: "just-in-time" reminders and updates.

Organization of Online Learning Environment: A Case Study of Two Business Courses

Minh Tran, University of Texas at Austin, USA

Abstract: This presentation describes the design of two graduate-level business courses in terms of content organization and instructors' pedagogy. An end of semester survey questionnaire was administered to the enrolled students to record their perception of the online learning experience. The objective of this study is to identify what instructional elements and/or activities, provided within the accounting and statistic online courses, contribute to or enhance students' learning achievement as measured by their perception of satisfaction, increase in knowledge related to subject matter and willingness to consider taking other online courses if available.

E-learning in Higher Education: A case study of Indira Gandhi National Open University, India

Manorama Tripathi, Indira Gandhi National Open University, India

The paper deals with e-learning initiatives made in the sector of Higher Education in India. It discusses the efforts taken by Indira Gandhi National Open University in integrating e learning with Distance Education. The paper offers suggestions for future and concludes that evaluating the outcome of e-learning is important as evaluation helps to rethink and redesign processes and make them more effective. Keywords: E-learning; ICTs; Higher Education.

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A Web-Based ESP Courseware Development for International Trade and Business in Taiwanese Higher Education

Shu-Chiao Tsai, National Kaohsiung University of Applied Sciences, Taiwan; Yu-Chiang Wang, Shu-Te University, Taiwan

The aim of this study is to develop a web-based ESP courseware for international trade and business in higher education. The courseware can be conducted by video on demand or through the Internet. The content of the courseware mainly includes three business fields: English Business Letters, Practice of International Trade and Terminology. In the design of the whole material, five skills for learning English are emphasized. In addition, an evaluation system combined with a self-checking or reference function is developed in order that learners can examine themselves immediately and understand their learning progress and achievement. The courseware developed in this study has been tried and used by 26 senior students in the four-year day-time program of the Applied Foreign Languages Department at a technical university. At the end of the pilot use of the courseware, a questionnaire was administered to elicit students' responses concerning its effectiveness. The overall average score was 3.90, which means that most students were satisfied with the courseware.

Examining Blended E-Learning towards Improving Students' Language Performance -- A Case Study in Taiwan

Shwu Hui Tsai, Hsiu Chun Chen, I-Chieh Yang, China University of Technology, Taiwan

This paper examined whether a blended E-learning program incorporated into a freshman English as a foreign language (EFL) class can benefit students performance on the General English Proficiency Test (GEPT) at a technological university in northern Taiwan. The blended E-learning program was embedded in existing EFL reading and listening courses. A simulated GEPT test was given prior to the blended E-learning program, and a separate simulated GEPT test was given after the blended E-learning. The students took a researcher-developed Likert-type attitudinal survey on students' perceptions toward their experiences on the blended E-learning. Data will be presented analyzing students' performance on listening and reading comprehension on the simulated GEPT and students' perceptions toward learning English in a blended E-learning program are discussed. Implications and suggestions are provided for EFL instruction for future study.

E-learning: Are we Ready?

Geoffrey Tshephe, North West University- Mafikeng Campus, South Africa

This paper is a report on an investigation into the challenges faced by former black institutions of higher learning with reference to North West University (Mafikeng Campus) Graduate School of Business. The urge and motivation behind this study is prompted by several factors and observations, which are noted as follows: Insufficient studies of this nature in South Africa and Africa at large, Need for IT training for both lecturers and learners, they need to be skilled so that they can use this skill in their teaching and learning process, Need for e-Learning to be introduced at Mafikeng campus of the North West University as it could improve the teaching and learning process of this campus, It will help the University to save travelling costs and extra payments of lecturers travelling to University's learning centres established around the province. It will also be of help to students who from other countries wishes to study with this institution from their homes.

Developing an effective eLearning strategy within an institution in the New Zealand Polytechnic and Institute of Technology sector

Keith Tyler-Smith, Christchurch Polytechnic Institue of Technology, New Zealand

The successful implementation of an eLearning strategy for an institution within the New Zealand polytechnic sector poses serious leadership challenges that go well beyond the choice of eLearning technologies or a stated set of objectives that eLearning is meant to achieve.This paper examines some of the key issues involved in developing an eLearning strategy that works such as the disruptive nature of eLearning, the ageing tutor population and their attitudes towards technology enhanced teaching and learning and the inadequacy of the dominant models of professional development for eLearning.

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Concept Mapping on the IAG System: An Effective Instructional Strategy for Promoting Analogical Thinking to Achieve Better Understanding in e-Learning

Tomohito Uchino, Toshiki Matsuda, Graduate School of Decision Science and Technology, Tokyo Institute of Technology, Japan

The purpose of the present study is to develop a concept map tool as the dialog interface of an Instructional Activities Game (IAG) developed by Matsuda (2003). This tool has a function to restrict movement, editing, and deletion of each element of the concept map, and a function to return an evaluation based on comparison with a correct answer map. Moreover, since the IAG system can change problems interactively, instructional material to teach how to create concept maps in a step-by-step manner can be created. Therefore, we herein propose an instructional strategy to promote analogical thinking by making the concept map gradually. In order to demonstrate the effectiveness of the proposed tool and the instructional strategy using analogical thinking, teaching materials based on the proposed strategy were realized as in the game board of an IAG, and the results of an experiment showed the effectiveness of the teaching materials.

Incorpareting Student Feedback In The Enhancement Of Online Colbarative Activities Introduction

Halit Turgay Unalan, Anadolu University, Turkey

This paper is based on the experiences of a group of undergraduate Fine Arts Education (FAE) students at the University of Anadolu (AU) while participating in an online collaborative activity. This activity was part of an action inquiry research project that was conducted over two full cycles. The selected students were taking a one-semester module on second-year level that was presented by using a blended learning approach (combining face-to-face and online delivery modes). The course facilitator had to consider creative ways to induce a diverse group of students to actively participate and collaborate in order to enhance the student learning experience.

Balancing Act! Key to Successful E-Learning Implementation

Molly Uzoh, Learning Right Technologies, USA

Many organizations that undertake e-learning implementation project suffer a sudden attack of multiple identity syndrome for a while. Due to other compounding variables, the crisis might kill or make the project. Infact, many e-learning implementations hardly survive the initial attack without indelible financial and psychological bruises. However, a proactive and participatory acceptance of the fact that they will be dealing with a complex issue typical of a "company" that is running multiple industries may yield a cure and prolonged sustenance. Yes. The organization may be in their regular industry, hi-

tech industry and educational/learning industry. The success of an e-learning implementation definitely depends on how well an organization balances its act in each of those multiple industries and dynamics that call for attention during the implementation. The exact solutions for successful implementation of e-learning are integrated into the discussion with examples.

Meeting Officer Roberts - A Strategy-Based Interpersonal Skills Game

Ralph Vacca, Glenn Albright, Kognito Solutions LLC, USA

Meeting Officer Roberts is a first-player virtual conversation that uses a proprietary conversation engine to place players in a role of a police sergeant and allow them to experience the challenges that accompany awkward, uncomfortable, and sometimes hostile feedback conversations with a typical officer. Developed by Kognito in conjunction with John Jay College of the City University of New York, this game was designed to be part of the institution's police leadership certificate. In the game, players must utilize awareness of emotions, active inquiry/listening, and negotiation skills to arrive at the best resolution to the problem at hand. The technology developed for this project is a new breed of branched storyline technology designed from a psychological perspective to provide concurrent conversation threads, dynamic activation of conversation threads based on emotional and contextual criteria, and dynamic non-player character reactions based on emotional and contextual criteria.

Piloting a Simulation-Based Learning Package for Nurses as a Means to Improving Pre-Code Management of Hospitalized Patients

Rena van der Wal, Vancouver Coastal Health, Canada; Bernie Garrett, UBC School of Nursing, Canada

The aim of this project is to evaluate how simulation-based training could help improve pre-cardiac/respiratory arrest management in the acute clinical setting. This project sought to identify if simulation based training in pre-code recognition and management could increase the expertise of trained nurses in surgical and medical hospital units. The project provided simulation based training to nurses to aid in the recognition of early warning signs for cardiac arrest, respiratory failure, shock, renal failure and acute neurological dysfunction, thus enabling them to take appropriate early intervention to improve chances of recovery and survival, and therefore improve patient safety. Early results have revealed positive indicators on the effectiveness of simulation-based training in this context, but also some concerns over the cost-efficiency of this approach.

SCUeL: Self-Contained Unit of eLearning

Jim Van Horn, University of Central Missouri, USA

This paper presents a model for Semantic Web Based Education (SWEB). The model provides direction for designing learning objects which can be created, stored, and retrieved using the technologies of the semantic web. We will present an overview of the semantic web and the concept of learning objects and their inter-relationship. We then present a model which utilizes a cooking paradigm including a recipe, ingredients, and activities for producing the final product, a lesson, which will result in the learner achieving the desired level of competency with the material. The recipe is the lesson plan and the format of the lesson plan is based on the seven elements of a lesson plan enumerated by Madeline Hunter.

Procedural SedationSedation Education for Nurses: Our interactive multimedia online curriculum pilot study results

Arlene Vanderhoeven, Kate Callaghan, Celine Savard, Vancouver General Hospital, Canada; Valentyna Koval, Karim Qayumi, University of B.C., Canada

Procedural Sedation is a widely used practice in many hospital departments' clinics and offices. To our knowledge there are no comprehensive educational courses available regionally, provincially or nationally for nurses to enroll in to educate nurses and facilitate the practice and administration of sedation. We designed an interactive multimedia online curriculum based on the Center of Excellence for Surgical Education and Innovation (CESEI) Learning Management System that included both theoretical and practical knowledge specific to Procedural Sedation. This paper assesses the efficacy of the development of the interactive curriculum in conjunction with patient simulation. Results of the study revealed that this combination of methods improves theoretical and experiential learning.

Perceptions of Faculty Development Programs: Further Inquiry into Technology Use

Pradeep Vanguri, Neil Gomes, University of South Florida, USA; Robert Gray, CE Outcomes, USA

Faculty development programs promoting the use of instructional technology vary tremendously across institutions in Florida and possibly nationwide, employing different instructional strategies and experiencing varying results. This study is a preliminary inquiry into the use of instructional technology and the utilization of supportive resources at higher-education institutions in Florida. This unique study also examines faculty opinions and best practices on the use of instructional technology.

She Learns - He Learns: What We Know about the Brain

Rick VanSant, Ferris State University, USA

Brain friendly learning has been a hot topic of investigation and implementation in the field of K-12 education for some time now. Yet there is scant evidence that fields outside of education are paying attention to recent developments in brain and learning research in designing their corporate, institutional and/or E-learning training structures. This paper explores recent research in gender specific brain friendly learning and what lessons E-learning designers might learn from that research.

An investigation into how Mathematics educators teach the outcomes-based curriculum

Vasanthy Velupillai, Tshwane University of Technology, SouthAfrica, South Africa; Ansie Harding, University of Pretoria, SouthAfrica, South Africa; Johann Engelbrecht, University of Pretoria , SouthAfrica, South Africa

This study investigates how educators at GET level (senior phase) go about teaching problem solving skills, reasoning and communication as indicated in the OBE mathematics curriculum (GET). Many high school graduates enter higher education

institutions with gaps in their mathematical knowledge. In comparison to previous curricula, the new OBE Mathematics Curriculum at the GET level, places much more emphasis on problem solving, reasoning and communicating mathematical ideas. If properly implemented as intended by the curriculum reformers, then many of the problems that are encountered at tertiary level might no longer exist.This study describes case studies of Grades 8 and 9 mathematics teachers in eleven secondary schools in Mpumalanga Province (South Africa). The case studies explore whether and how the mathematics teachers go about trying to achieve the outcomes mentioned in the OBE (GET) mathematics curriculum.

Suitable research approach for social Inclusion and Wireless / Mobile Learning in Africa

Vasanthy Velupillai, Tshwane University of Technology, South Africa

Choosing the correct philosophical reseach paradigm has an impact on the study. This paper describes the philosophical assumptions underpinning the choice of the suitable approach for social inclusion through wireless/mobile learning. The main focus involves to look at the topic through different reasearch paradigms which are positivist, interpretivist and critical. Find the ontological and epistemologocal reasons behind these approahes and choose the suitable approach to do the reseach with the support of literature review. It also explains in detail social inclusion through m-learning.

Building your first Topic Map – Maximizing the Potential of your Course Management System using Intuitive, User-Centred Indexing Technologies

Vivek Venkatesh, Steven Shaw, Gretchen Lowerison, Concordia University, Canada

There exists significant concern that learners are unable to effectively use search-and-retrieval tools in course management systems (CMSs) to locate relevant information in completing scholastic tasks. An area of development that holds great potential for the educational sphere is ontology-based search-and-retrieval capability. One technology in particular, topic maps (ISO 13250, 2002), promises to provide flexible and powerful tools for searching and browsing content within a CMS. For learners, the benefits include more exact searches resulting in an increased ability to locate relevant information. For developers and instructors, the topic maps enable a conceptual overview of the knowledge domain. Our roundtable workshop will enable e-learning instructors and professionals involved in the design of CMSs to become acquainted with the potential of topic map technologies as an indexing tool for a knowledge repository, as well as a search and retrieval tool. In addition, participants will be able to build ontologies and construct topic maps using intuitive internet-based authoring tools during the roundtable session.

Theoretical and Practical Implications of Using Topic Map Technologies in E-Learning Applications

Vivek Venkatesh, Concordia University, Canada

This paper provides a theoretical platform to discuss the use of topic map technologies in online course management systems (CMSs). Theories of cognition and psychology have long informed the production and implementation of instructional interventions in online learning environments (OLEs). The author sheds some light on how theories of cognitive information retrieval (CIR) can better formalise abstract notions of learner cognitions like task understanding and self-regulated learning. The development of education-related topic map ontologies must necessarily be based on a combined theory of information sciences and educational psychology. In an effort to illuminate the unified theory proposed herein, discussions are grounded in a practical case-study describing the development and implementation of an education-related topic map currently in use at a large North American University.

Topic Maps as Indexing Tools for E-Learning: Exploring Graduate Learners' Academic Self-Regulatory Processes

Vivek Venkatesh, Steven Shaw, Concordia University, Canada

There is a paucity of research on the use of topic map (ISO 13250, 2002) technologies in the educational field. This paper reports on the conception, development and implementation of a topic map-based index for a neo-corpus of instructor-annotated graduate student essays. The essays were navigated by 28 learners from three different sessions of a graduate e-learning course with the aim of improvement of performance on an ill-structured writing assignment. This paper also posits that the theoretical platform for the design of the topic map-based neo-corpus lies in the intersection of cognitive information processing and cognitive information retrieval theories. Analyses of data collected suggest that learners who had lower domain knowledge benefited most from the use of the topic map. Interviews demonstrated the variety of ways that learners engaged in non-traditional forms of learner-learner and learner-instructor interactions in online workspaces.

The virtualMe: An integrated teaching and learning framework

Michael Verhaart, Eastern Institute of Technology, New Zealand; Kinshuk -, Athabasca University, Canada

A modern teaching and learning environment includes many modes of delivery, including face-to-face, online and offline. The internet is evolving into a place where individualization has become common and connectedness a cornerstone, and this is emphasised in what has become known as Web 2.0. How can this paradigm be used in a teaching and learning environment? Developing a web based teaching and learning system centered on an individual that allows connection to the internet's resources would be consistent with this paradigm. This paper investigates an integrated framework that has been developed for a teaching and learning environment that is centered on managing the information and knowledge of an individual teacher. Prototype web-based systems have been developed and trialed in an attempt to identify suitable features and functionality. The current prototype, termed the virtualMe, is described, and an analysis of responses from a survey of current and potential users is discussed.

Perceptions of Academics and Students Using University of East London Virtual Learning Environment 'UEL Plus'

Dina Vyortkina, University of East London, UK

University of East London started integrating a new Virtual Learning Environment (VLE) System UEL Plus (Blackboard based) in September 2006. It is anticipated that by September 2008 it will replace the current system, WebCT, engaging hundreds of students and academics. We are evaluating academics' and students' perceptions of the new VLE and its implementation process. Comprehensive data regarding interaction with the web-environment, student/staff satisfaction with their e-learning experiences, barriers, facilitating factors, perceptions, attitudes, and lessons learned by people involved in the innovation are used for developing actions to improve quality of student experiences, facilitate teaching, enhance learning, and promote research in the areas of using VLE in higher education, quality improvement, and staff development.

UEL Benchmarking of E-Learning and Pathfinder Projects

Dina Vyortkina, University of East London, UK

University of East London participated in the national Benchmarking of E-Learning exercise focusing on e-learning culture, infrastructure, and expertise. This project was managed by the UK Higher Education Academy (HEA) and used the Embedding Learning Technologies Institutionally (ELTI) methodology to guide its activities and data collection. Academics, non-academic staff, and UEL students shared their opinions about the state of e-learning, thus providing rich data for capacity analysis and shaping an institutional e-learning strategy. We discovered several emerging themes: change and continuous improvement in e-learning culture, infrastructure, and expertise; development of a comprehensive e-learning staff development portfolio of programs and resources; embedding e-learning into all policies and practices; and developing our internal and external communication strategy to support e-learning implementation and our sustainable staff culture change. UEL was selected as one of 28 UK institutions to participate in the Phase 1 Pathfinder program funded by the HEA.

Electronic Portfolio Encouraging Active Reflective Learning Software (ePEARL)

Anne Wade, Centre for the study of Learning and Performance, Canada; Einat Idan, Philip Abrami, Catherine Lebel, CSLP, Canada; Bev White, LEARN-Quebec, Canada

ePEARL is bilingual, web-based, electronic portfolio software designed to encourage self-regulated learning within student-centred curricula. Developed in PhP using a MYSQL database, three levels of ePEARL have been designed for use in early elementary (Level 1), late elementary (Level 2) and secondary schools (Level 3). Features available include: customizing the portfolio; setting outcome and process goals; creating new work; linking to existing work; reflecting on work; sharing work; obtaining feedback from teachers, peers & parents; editing work; saving work under multiple versions and sending work to a presentation portfolio. ePEARL is available without charge to the educational community. For further information visit http://grover.concordia.ca/eportfolio/promo/

A Learning Management Portal for E-Learning 2.0: a Teacher's and Developer's Perspective

Les Walczowski, Mark Ellis, University of Kent, UK

This paper is concerned with the development of a new Learning Management Portal based on Web 2.0 technology. This portal is one of a new breed of composite tools that support novel teaching and learning strategies such as using RSS feeds, blogs and wikis as part of the E-Learning environment. The portal is based on Microsoft's SharePoint Server customized with web parts developed in C# which support integration with management databases.

Creating subject matter experts in 8 weeks: A case study of blended learning

Peter Wallace, Innovatia, Canada; Gregory Fleet, University of New Brunswick, Saint John, Canada

This best practices session will describe a pilot training program intended to "clone" resident subject matter experts within an organization, using a blended learning methodology developed in-house by Innovatia. The goal was to observe and potentially refine the training process, through an examination of the choice of electronic and web tools, the methods of interaction, and the time-frame of the program. Lasting a mere eight weeks, 5 individuals (1 mentor and 4 interns) came together from locations across North America to master a new skill set and apply it in their daily responsibilities and deliverables. Observation and survey methods were used to gather feedback, detailing the strengths and shortcomings in the development and delivery of the curriculum, as well as provide recommendations to improve future iterations. The paper will summarize this case study and critically evaluate the possibility of its further use both within the organization and as a new service offering to its customers.

Course Access Frequencies and Student Grades

Haomin Wang, Mingming Shao, Dakota State University, USA

This paper is a report on the findings from a study that examines student tracking data in relation to student academic performances. Descriptive and inferential statistic analysis methods were used to determine the correlations between student course access frequencies and student grades. The study also examines course access and grade differences between female and male students, and between on-campus and online course sections. The findings are mixed. Significant correlations are found in some cases, but not in others. The strengths of associations are generally weak to moderate. New questions are raised and hypotheses are suggested for further exploration and study.

Rights management and protection of digital documents base on image watermark

Ming-Shi Wang, National Cheng Kung University, Taiwan

With a diversification of web service, the website is gradually entering the web 2.0 ages. Now Webs are not only used for down load and reading the material of the web, but also the readers can upload their material to the web and share their experience. For these digital content providers, the copyright protection issue is the most serious problem for them. In this paper, a prototype of digital rights management (Digital Right Management, DRM) system is developed. In this system X.509 certification standard is used to do the user identity authentication. Lossless watermarking technology is applied to embed the specific watermark provided by the digital content's owner into each page of his digital content for protecting the

copyright. To encrypt the content for considering the security of transmission, both symmetric and non-symmetric encryptions are adopted.

Features Of Future Learning Management System

Weimin Wang, Thomas Edison State College, USA

As more and more colleges and universities start to offer online courses and degrees, most institutions apply at least one learning management system (LMS) to deliver their online courses. Working with faculty members at different colleges, the author will discuss the most commonly used features of LMS, and features that the future LMS should include to meet some special needs.

Quality Control Of Online Course Design

Weimin Wang, Cynthia MacMillan, Thomas Edison State College, USA

As more and more colleges and universities start to offer online courses and degrees, the quality of the online courses become crucial for the success of a college's online programs in the increasingly competitive online learning market. There are many factors that can affect the success of an online course or program. This paper will focus on one aspect, the instructional design process in course design. It will share some instructional design practice and procedures of quality control during the online courses design in a non-traditional state college in U.S.

Versioning RLOs as 'Study Skills Toolkits' for Different User Groups and Developing Community Tools to Support Sharing and Customisation

Julie Watson, Kate Dickens, University of Southampton, UK

As patterns of need in twenty-first century higher education change so must the solutions. E-learning solutions, in particular, need to be adaptive to fit a range of teaching and learning situations. eLanguages, a research and development unit at the University of Southampton, develops online toolkits of reusable learning objects (RLOs) in Study Skills that can be versioned for different student user groups. Underpinning them is an approach which seeks to deliver high quality content and be cost-effective. Reusability and versatility are central to this. With the creation of a large base of RLOs has come recognition of the need to manage and customise these resources easily and a suite of tools enabling such actions has been developed. This paper will present the toolkits and the pedagogic design of the RLOs. The web-based tools to support management and customisation of RLOs, and potentially facilitate new toolkit creation, will also be introduced.

The Virtual Classroom: Student Perceptions of Podcast Lectures in a General Microbiology Classroom

Rachel Watson, Christine Boggs, University of Wyoming, USA

Podcasting has taken the world by storm, expanding and an astronomical rate as a form of entertainment. Despite the huge popularity of podcasting as entertainment it has yet to be well studied as an educational tool. In this study we developed and presented podcasts to completely replace three in class lectures in a General Microbiology Course. The podcast lectures were made available to students both via an RSS feed as well as presented on the screen in the actual classroom during what would have been the regularly scheduled class time. Student response to the podcast lectures was extremely positive with a large majority of students enjoying the flexibility of podcast lectures for review. Students also thought that they learned the podcast material as well the material from in class lectures. Ninety percent of students indicated that they thought the podcast project should be continued.

A Year in the Blogosphere

David Webster, University of Gloucestershire, UK

Our Religion, Philosophy & Ethics course blog, inspired by E-Learn 2006, is almost a year old.The first year of its operations has been a story of success and frustration. This workshop is an exploration of the answers we have found to these problems, an account of our journey thus far – and an attempt to see where this interactive road will lead us.

A Framework for Activity-Centered Instructional Design of Online Course

Deng Wenxin, Yin Rui, Educational Technology Institute, China

Corresponding with the OCW movement launched by MIT of the United States, the development of online course, as one of the means of resources construction, has been increasingly paid close attention in China since the 21st century. It is indicated from many facts that people often focus on how to organize the teaching contents while neglect how to design the learning activities in the development of online course. This paper proposed a framework named "R-A-E" for activity-centered instructional design of online course from the perspective of learning activity. And then this paper took a course Research Method on Educational Technology as an example to discuss how to design and develop the online course according to the framework.

Carrots & Cowprods: Lessons Learned in Managing IT Professionals in an Educational Technology Center

Gary Westergren, University of Missouri - Columbia, USA; Neeley Current, University of Missouri - Columbia, USA

This paper will present lessons learned in managing IT professional staff in The Allen Institute, a learning & technology research facility at the University of Missouri. Primary findings are the need to understand the motivational needs of primarily young, full time and student part-time programmers and analysts. Also reported is the contribution of laboratory design in improving and sustaining job performance. Another finding is the need to have balanced and informal relations among faculty, full-time IT staff, student programmers and other staff.

Geographically Distant Usability Laboratory Implementation

Gary Westergren, University of Missouri - Columbia, USA; Neeley Current, University of Missouri - Columbia, USA

This presentation will address experiences obtained in creating a shared usability laboratory consisting of individual facilities at the University of Missouri - Columbia and a partner university in the Republic of China (Taiwan). Primary lessons learned relate to the successes of e-learning in creating this cross-cultural research and learning environment.

A Systemic Approach to Music Performance Learning with Multimodal Technology Support

Tillman Weyde, City University, UK; Kia Ng, University of Leeds, UK; Kerstin Neubarth, City University, UK; Oliver Larkin, Thijs Koerselman, Bee Ong, University of Leeds, UK

The use of technology-enhanced learning in education is mostly seen as support for conveying and testing clearly defined knowledge and skills. In music performance education, the goal of the education is more personal and dynamically determined in the pedagogic and aesthetic interaction between the teacher and student. The approach taken in the i-Maestro project is therefore to support the teaching process by adding interaction forms and feedback loops that create new dynamics in the learning process. For music performance on string instruments, we use multimodal feedback with 3D motion tracking and sensor input to give students and teachers new forms of feedback and to make available aspects of performance that are hard to access by direct perception alone. We give examples how the integration these tools into the interaction and feedback loops of traditional music education can help to address problems like the gap between music theory and practice teaching.

Beyond Delivery: A Case Study in e-Learning for Podiatry Students

Julie Willems, Monash University, Australia; Lloyd Reed, Queensland University of Technology, Australia

Learning styles is a concept that can evoke strong opinions. Yet, used judiciously in a specific context, it can serve as an indicator of the learning style preferences of a cohort of students, and help guide the construction of their e-learning environment at that time. Moreover, it can be utilised as a metacognitive tool to aid the understanding of personal learning processes (Coffield et al, 2004). Using both the Index of Learning Styles (Felder & Soloman, 1991, 1994) and a qualitative survey questionnaire, research was conducted to investigate the impact of learning styles within the context of a virtual podiatry clinic. The aim was to examine the congruence between students' learning styles and the e-learning design to assess whether this had an impact on students who indicated that they found the virtual learning environment only 'moderately helpful'. Such feedback was divergent to the majority of students who had reported the virtual clinic as being a highlight of the unit.

Considering Learning Stations for Active e-Learning Design

Julie Willems, Monash University, Australia

Technology provides educators with the possibility to think outside the square: to be visionaries in devising new designs for e-learning environments that move beyond didactic instructional approaches (focusing on the delivery of content) to designs for active and engaging learning. It also provides the opportunity for educators to consider the diverse approaches to learning of their e-learners. This paper considers the incorporation of learning stations in e-learning design as a means for students to engage in quality learning and promote their construction of meaning.

Can a face to face facilitator be transposed to supporting online learning?

Mriga Williams, University of Exeter, UK

According to Mayers & de Freitas (2001) sophisticated technology has brought us to the 3rd generation of teaching and learning in the 21st century. The use of technology allows for having a different method of creating the dialogue between the learner and the facilitator. The use of technology increases flexibility of time, space and access to educational institutions. My own experience in recent times has been of using blended approach to enhance the students' learning experience. I examined my practice and identified the skills I had to use and the role I had to adopt in order to support learners (Williams 2006). Currently I am taking this learning further to examine the role and skills of an online facilitator and compare it to that of traditional face to face approaches. Are the role and skills different when applied to courses developed with different frameworks? What staff development will need to be undertaken to ensure skilled online facilitators are enhancing student learning?

Path of Podcasting: The Zen of Social Computing, Continued

Vicki Williams, Barry Williams, Penn State, USA

Letting go is contrary to the nature of many teachers. It is as if they believe that no learning happens unless it is carefully orchestrated by themselves. Students, on the other hand, may learn more spontaneously. Vygotsky emphasized the idea that people learn within their cultural and social contexts. His "teacher" allowed students to go through a process of discovery and self-initiated exploration. Today, technology provides the context and students use this context to learn in their own way or ways; hence, social computing. With a set of pre-defined learning outcomes mandated by the institution, it is no surprise that instructors try to force learning and regulate knowledge, but the product is not necessarily true learning. This presentation will discuss strategies for creating a meaningful learning environment, using the tools of social computing to encourage exploration and foster deeper learning.

Faculty as Students: Immersing Faculty in an 8-Week Hybrid Course in Course Re-Design Principles and Strategies

Kevin Wilson, Boise State University, USA

Recently, 50 faculty participated in the Hybrid Spring Seminar, an immersive 8-week hybrid course in course redesign in which faculty are introduced to principles of effective course design; challenges and benefits of hybrid courses; and pedagogical best practices informing the transformation of traditional courses into hybrids. In the process, they experience first-hand what it is like to participate in a hybrid course. The Spring Seminar offers a potential model for other institutions to use in assisting faculty as they transform traditional courses into hybrid courses. By reviewing the content, design, and delivery of the Spring Seminar, participants will gain insights into a model for addressing faculty's inexperience with the course-design process and with hybrid courses. They will also explore the methods by which faculty are engaged in a

concentrated, immersive experience aimed at acquainting them—-from a student's perspective—-with the challenges and benefits of hybrid courses.

Increasing Social Interaction in Online Classes Through Live E-learning

Janice Wilson Butler, Michael Sullivan, University of Texas at Brownsville, USA

Social interaction is a driving force in the behaviors and interests of Net Gen learners. Not surprisingly, alienation and isolation are primary reasons students drop or stop enrolling in online courses. This session provides rationale for the use of live e-learning tools in online courses to bridge the isolation students often feel. While these tools keep the learners involved and participative by providing a sense of community, they nevertheless present challenges in the initial stages of implementation. Multiple suggestions for overcoming inevitable technology glitches and management challenges faced when implementing live e-learning strategies will be discussed. Ideas for monitoring the effectiveness of e-discourse, attributes of genuine social interactions versus pseudo dialogues, and social cohesiveness in live e-learning classes will also be discussed. A demonstration of live e-learning will provide insight into the dynamics of using this tool in an online environment.

Detecting Bio-terror: Noir radio drama meets instructional design

Shelly Withers, Professional Development Program, SUNY Research Foundation, USA

This presentation showcases a groundbreaking, selfpaced Ecourse, Detecting Bio-terror, (see attached screen shot; course will be "live" in August 2007). The course reaches out to a national audience of public health, medical and law enforcement practitioners through instructional design that marries traditional pedagogy with a multi-media "film noir" drama (audio and images). Capitalizing on the "stickiness" of stories, instructional content is contextualized in a fictional bio-terrorist investigation that highlights expert performance, situated knowing, practical conflicts, and true-to-life interactions encountered in the practice of forensic epidemiology. With an emphasis on empowering learners, Detecting Bio-terror underlines learner self-assessment, non-linear navigational options, unique toolkits, and strategies for high engagement, including high concept (Pink, 2005) design. This presentation is centered on our work with an interdisciplinary team of subject matter experts, crafting the dramatic narrative, and audio studio production challenges.

Second Story: Lost, Learning and Story-driven Instructional Design

Shelly Withers, Professional Development Program, SUNY Research Foundation, USA

This brief paper discusses story-driven instructional design through examples from television and from our own courseware (sees URLs below). The paper provides a concise and elementary introduction to narrative knowing, and draws on the works of Bruner, Riessmann, Polkinghorne, and others, and explains why stories in e-learning can succeed in supporting the kind of behavior change clients ultimately seek. The inherent strengths of "storied instruction" are discussed, and several examples are provided from actual e-courses.

Sense-making and credibility of health information on the social web: A multi-method study accessing tagging and tag clouds

Holly Witteman, Sambhavi Chandrashekar, Lisa Betel, Laura O'Grady, University of Toronto, Canada

Since its inception, the Internet has been used for a wide variety of objectives, few more popular than health care. Many professionals as well as laypersons have created web sites with health-oriented content. Recent developments in Internet technologies, referred to as Web 2.0 and social software, have emphasized the use of applications that are collaborative in nature. Users are now creating, editing, and combining content from a variety of sources, as well as sharing their own anecdotal information. Material posted online is tagged or labeled using individual indexing systems or folksonomies. Tag clouds visually represent collections of tags to facilitate navigation at a Web site. In order to help users find credible health content, we need to understand how information is being tagged. Using a sense-making theoretical framework, this research intends to explore the ways in which users tag online content and use tag clouds to find health information.

The Industrialization of Education: Creating an Open Virtual Mega-University for the Developing World (OVMUDW).

Isaac Wojcik, University of North Florida, USA

Over the last two decades, international support for higher education in the developing world has diminished as the focus has shifted to primary and secondary schools. The most cost-effective way for the international community to support current efforts by nations, institutions and individuals in the developing world is to create a global, distance, higher-education system. This Open Virtual Mega-University for the Developing World will not only offer degrees directly to individuals but will also aid existing institutions in their efforts to increase the quality and access to higher education worldwide. Existing open-source technology provides a means of creating such a virtual mega university, and challenges such as funding and accessibility can be overcome.

Mobile phones and schools; the development of a taxonomy of risk

Ruth Wood, Kingston University, UK; Shirley Atkinson, Christopher Johnson, Andrew Phippen, University of Plymouth, UK

Whilst developing technologies such as mobile communication devices are presenting education with opportunities to generate flexible and portable solutions to teaching and learning it is clear that there are other, less desirable, outcomes occurring. With the convergence of technologies, the most recent mobile phones offer a variety of opportunities to receive, capture and transfer data. With such potential, the incidents involving the transfer of sensitive data and digital intrusion through mobile phones have been documented within the media. In order to examine the current and emergent risks mobile technologies may present towards privacy, the following paper employs the use of a taxonomy designed specifically for this purpose. Finally, the implications for educational establishments, mobile phone manufacturers and policy development in light of such risk analysis will be considered and discussed.

The Performance Analyst Tool: Empowering Principals and Teachers with an Effective Performance Evaluation Tool and Method

Geoff Wright, Brigham Young University, College of Engineering, USA

Performance evaluation is an integral component of helping teachers reflect on pedagogy and therefore improve and build best practices. Most principals are expected to help teachers understand their performance by performing various evaluations; often these evaluations come in form of classroom visits, observations, and dialogue. This research explores the use of a video coding and annotating tool, the Performance Analyst, to help streamline this process by encouraging more in-depth teacher reflection, teacher–to-principal dialogue, and improved teacher performance.

Arts-Based and Digital Response to Adolescent Literature

Mary Wright, University of Wisconsin - River Falls, USA

This paper traces one teacher/teacher educator's journey in cultivating technological pedagogies in English Education as a way to democratize practice as one that is more inclusive, creative and engaging. The foundation of this pedagogy is rooted in the use of arts-based response, and reflecting on how arts-based response to literature has evolved with changing technologies.

The moderation effect of metacognitive strategies on the relationship between Internet Search and Critical thinking

Chun-Ping Wu, Syracuse University, USA

Critical thinking skills are important in successfully living in our information-rich and technology advanced society. The Internet has been adopted by many learners as a daily learning tool to seek information from a number of types of global sources to support accomplish given learning tasks. The level of interaction with the Internet might also be related to the level of critical thinking skills that learners demonstrate during academic problem solving activities. During the process of reasoning through the problems, good thinkers generally execute metacognitive strategies to consciously plan research strategies and monitor their progress in gathering information that meets the given expectations or pre-established goals. Therefore, this study aimed to identify a theoretically reasonable model that represents the relationships among Internet search, critical thinking skills and use of metacognitive strategies. A survey method was employed to gather data for the observed variables to test the proposed structural equation model.

Do cognitive style and interactions of personality types predict a social learner's learning style?

Shao-Wei Wu, Penn State University, USA

Although researchers have demonstrated that learners with different learning preferences can succeed in the online learning environment (Dille & Mezack, 1991; Oxford, Young, Ito, and Sumrall, 1993), it was found that successful distance education students tend to prefer an independent learning environment (Gee, 1990; Diaz, 1999) and are less collaborative than learners in the traditional classroom (Diaz, 2000). Hence, online learners who are more dependent and collaborative might struggle in the online learning environment and need more guidance throughout the learning process. The one-size-fits-all method may accommodate some learners but discriminate against those who have different preferences. The purpose of this study is to determine if psychological type and cognitive styles can be used to support the existence and definition of a social learner group. Participants were 136 undergraduate students enrolled in an online course at a research university in northeastern United States.

Studies in Maximal Learning Speed

Michael Yacci, RIT, USA

Abstract: This article continues the search for a technology of Maximal Learning Speed: the set of techniques that can condense the time of instruction to provide faster learning. This paper describes a pilot study based on theory and past research with results that demonstrate the potential of Maximal Learning Speed. Additionally, an in-process research study is suggested that looks at the effects of compressing demonstrations, the primary source of instruction in procedural learning.

Relationship among course type, self-efficacy, mentor and learning performance: Toward e-learning satisfaction model

Masanori Yamada, Tokyo Institute of Technology, Japan; Yutaka Saito, Toshihiko Gondo, Aoyama Gakuin University, Japan; Toshio Mochiduki, The university of Tokyo, Japan; Yoshiko Goda, Takeshi Matsuda, Fumiaki Iwasaki, Kinnya Tamaki, Aoyama Gakuin University, Japan

This study examines the potential relational model of e-learning satisfaction and learning performance in blended learning and online learning alone. We then focused on five factors and one variable based on our practical research, in order to compare course type and investigate the relationship among them; course type, self-efficacy, satisfaction with mentor's behavior, perceived learning consciousness during learning, clarity of material as factors and test score as performance. The results showed the significant effect of course type on satisfaction with mentor's behavior. The significant relationship, on the other hand, was revealed between factors and performance, which indicated that course type, self-efficacy, mentor, clarity of materials and learning consciousness play an important role in successful learning online learning.

Significance of Utilizing Multi-angle DVD to Observe Sessions in Courses on Art

Yoshiaki Yamada, NARUTO University of Education, Japan

Ideal ways of doing research on teaching have been found using books and documents written by others. However, these will never become the core of research on teaching. This is because the kernel of a teacher's leadership skills can be formed through practical experience like a taxi driver's or actor's.There are numerous restrictions on videos recorded by general methods. They are not especially useful in art classes. The multi-angle DVD discussed in this paper is one way of solving

such problems. First, I will discuss the characteristics of multi-angle DVD by comparing single-angle images and multi-angle images. Next, I will discuss the possibility of using multi-angle DVD in classroom observations. The use of multi-angle DVDs was investigated by college students.They watched the DVD that recorded Ms. Wakai's "Clay making" class, and made the teaching plan based on it.

Recognition of Icon in VDT Work

Haruhisa Yamaguchi, Okayama University, JAPAN, Japan; Yuka Kawasaki, Graduate School of Teacher Education Hyogo University of education, Japan; Yumi Yamaguchi, Faculty of Medicine, Japan

This study examines the difference of recognition of the Windows folder icons by school age. An appropriate screen design makes icon search easy in a VDT (Visual Display Terminal). This study focuses on the difference of visual cognition of elementary school children, junior and senior high school students, university students. Search time becomes remarkably faster when the icons are placed in numerical order than when they are placed at random. In addition, the influence is very obvious when the number of the icons in the display increases. The influences on search time by vertical and horizontal direction placements were analyzed. They are classified into 3 types depending on how the viewpoints move at the time of an icon search.

Ability Measurement in Computer Literacy using the Item Response Theory for Adaptive Learning

Osamu Yamakawa, Masahiro Kikusawa, Takeyuki Tanaka, Fukui Prefectural University, Japan

The computer literacy of new students in Japanese university is fairly diverse today. Thus we introduced a placement test using item response theory (IRT) to estimate the students' ability in computer literacy. For measuring the change of the proficiency, we have had the online tests from 2004 to 2006. The ability distributions of students are almost identical for three years. As the result, we conclude that the measurement of the students' ability by IRT is quite stable, even if the question items have been partly changed. In 2006, according to the result of this test, students have been separated into an advance class and a basic class. The learning performances of students are measured by the same tests before and after the computer literacy course. The result shows us that highly skilled new students are unsatisfied with the course. Therefore we are planning an adaptive learning in which students can learn according to their abilities.

Application of Multimedia Theory to an Evaluation of Web-based Multimedia

Junko Yamamoto, Slippery Rock University, USA

There is a countless number of educational multimedia available today, but many distract from learning by causing cognitive overload in working memory. However, teachers may use these inadequate media because they are not aware of the theory. This can be prevented if teacher educators introduce the theory to future teachers and show them how to apply the theory to their practice. This ongoing study is a pre-post comparison to measure the needs and the effectiveness of instruction designed to increase the awareness and use of multimedia theory among preservice teachers.

Using Digital Movie and Online Discussion Forum to Facilitate Microteaching for Future Secondary Teachers

Junko Yamamoto, John Hicks, Slippery Rock University, USA

Preservice teachers can benefit greatly by getting feedback on their teaching from their peers. This process is called microteaching and has facilitated linking theories, practice, and reflection, which have contributed to preservice teachers' growth since 1950s. In addition, immediate feedback from peers and instructors can enhance the quality of reflection. Also, increased frequency of the cycle of lesson planning, teaching, viewing video for self-critique, and peer feedback, is likely to promote higher performance. In a College of Education on the East Coast of the United States, the increased frequency for such a cycle was realized by digitalizing microteaching videos, and simultaneously providing the videos to multiple students. Three classmates per student viewed videos at different computer stations and anonymously wrote feedback on Blackboard's discussion board. The use of Blackboard resulted in quick feedback from multiple peers and honest comments.

The Effect of Technology Accptance on Undergraduate Students' Usage of WebCT as a Collaborative Tool

Huei-Hsuan Yang, University of Central Florida, USA

This study is a derived from Davis' (1985) Technology Acceptance Model (TAM), a hypothetic model will be designed to replicate the TAM and then to measure the impact of two constructs: social presence and sociability on students' attitude toward the use of WebCT and the relevance of the actual usage. The purpose of this research is using a hypothetic model to re-examine the relationships between students' attitude (AT) toward the use of WebCT in University of Central Florida and the relevance of the actual usage (AU) in light of social presence (SP) and sociability (S). This study anticipates finding evidence of students' attitude toward how WebCT as a collaborative tool influences their use of the system to improve their learning environment.

Effect of Problem Solving Approach to the Student Satisfaction and Achievements

Saygin Eylem Yavuz, Murat Ataizi, Anadolu University, Turkey

The goal of this study was, in scope of the methods that are used in the national upbringing system, in the extent of the constructivist learning, by means of the problem solving method in an environment in that all the needs of the ninth class students are given, to have fun at the foreign languages study, and to evaluate the results. The problem solving method was used in the English language class of the ninth graders in Anatolian vocational school, Eskisehir, Turkey. In conjunction with the effects of the different instruction methods on the achievements and the satisfaction of the students were compared. Moreover; we hoped to make positive supplements, with the conditions of the effects of the problem solving method on the student satisfaction, in the construction of the foreign languages instruction of the open High school in Turkey.

Utilizing Online Peer Assessment Process in an Online Graduate Course

Harun Yilmaz, TÜBITAK, Turkey; Sami Sahin, Gazi University, Turkey

This study described an online peer assessment process in an online graduate course. Fourteen graduate students from one of the biggest online university of U.S. participated in this study. Participants have different education-related academic backgrounds; however, they have taken the same master's level course which is three credits. Students' perception and the process itself was explored and results of this study may affect the design of online courses.

Towards Creating Dynamic Asynchronous Discussion Forums Online: Ten Guidelines

Yanyan Yong, Tidewater Community College, USA

This paper focuses on the central role of the asynchronous Discussion Forum in online social science and humanities courses. Given the differences between the online and classroom experience the design and evaluation of online discussion questions should take account of the special features of the computer mediated learning environment. This study makes use of data collected from student discussions in online history courses and from surveys that asked the students for their reflections on their online discussion experience. Results from these data became the basis for proposing ten guidelines for online discussion forums.

Design Principles of IPTV based elearning to integrate learning effectiveness and efficiency

Yeong-Mahn You, Sukjin Kwon, So-Young Son, Hyojung Jung, Hanyang University, Korea (South)

This study is to develop IPTV-based e-learning content. Design principles are drawn from goal-based scenarios and cognitive load theory, concerning with the learning effectiveness with IPTV's technological advantages, which gets over the limitation of traditional TV programs and computer-based learning. The first principle is drawn from the theory of goal-based scenario, providing contextualized cases and opportunities of failure expectation and reflection with active interactions among peers and tutors. The second principle for the interface design is taken from the cognitive load theory to optimize to learner's cognitive load, maximizing the positive cognitive load and (or) minimizing negative cognitive load. Applying those principles, the program for English conversation is in the process of development, and sample screens are suggested.

Effects of Animated Agent with Instructional Strategies in Facilitating Student Achievement of Different Educational Objectives in Multimedia Learning

Hsin I Yung, The Pennsylvania State University, USA

The purpose of this study is to examine the instructional effects of a computer generated agent providing verbal and visual prompts in facilitating students achievements of different educational objectives conceptual knowledge on measuring different educational outcomes. One hundred college students will be randomly selected to two instructional treatments with a control group. Specifically, the objective of this research is to contribute to the creation of guidelines for effective use of animated agents to facilitate learning as well as portraying the notion of scaffolding in the design of multimedia learning.

Gender Sensitive Media Composition through Participatory Design: Evaluation Concept for the Development of an Online Role-Play Game for Girls

Sabine Zauchner, Birgit Zens, University of Krems, Austria

A number of indicators point to a high potential for computer games in the context of education. Yet, with regard to the usage of technology, a gender gap exists showing a poor usage of computer games by females. Reasons for this are that the computer games contents' don't correspond to the interests of females, or are designed by stereotypical conceptions. Hence, design approaches that reflect the interests of females and break stereotypical gender models are needed. This paper presents the participatory design of an online role play (SITCOM) with the target group of girls being continuously involved in the development process. The results of the continuous evaluation were the basis of the entire design process. Methods of data gathering were group discussions, interviews, questionnaires, and usability tests. The results indicated that the approach was successful in meeting the demands of the target group and breaking down traditional gender stereotypes.

E-Learning in Hospitals: A Project with Young Adult Patients

Birgit Zens, University of Krems, Austria; Eva Giefing-Meisinger, University of Vienna, Austria; Holger Bienzle, die Berater, Austria

Long-term hospital patients with severe chronic illnesses are likely to suffer from being isolated from their everyday lives. Thus, learning activities that go beyond illness related issues might ease the reintegration upon discharge. Hospital patients are restricted in their time-space coordinates and might hence benefit from the flexibility of e-learning. This article presents the evaluation of a job orientation course for young adult patients suffering from brain cancer and other severe illnesses. The course was offered in the scope of the European project eHospital. Evaluation instruments were questionnaires for patients and trainers, interviews with the hospital staff, a focus group discussion with the project consortium, and expert ratings of the online materials. The results indicated high satisfaction of the participants and good learning outcomes. Impeding factors were the organizational and technical conditions in the hospital and insufficient IT skills of the patients.

Java ME Game Applications Development for IT Curriculum

Chen Zhang, David Hill, Bryant University, USA

The purpose of this paper is to discuss the advantages of teaching Java ME, to students with basic Java or other high-level language programming experience in a college level IT curriculum. These projects can be adopted in a CS/IT curriculum following introduction to Java. Introducing Java ME at the early stages of the learning process will not only expose students to this emerging technology but provide more time for students to develop and refine their skills while in college. This paper tries to contribute some ideas for Java ME projects that start uncomplicated and eventually build to client/server architecture Java ME game applications. The instructor can dynamically apply these projects as curriculum components to reinforce introduction of various programming techniques and object-oriented programming paradigm.

Adult Learners' Characters in Distance Education

Jing Zhang, New Mexico State University, USA

Compared to children, adults have special needs and requirements as learners. Adult learning in distance education is a relatively new area of study. Adult learner has distinct and unique characteristics and different needs with children. The field of adult learning was pioneered by Malcom Knowles. In the following chapter, the chrematistics, and the aspects of adult learning motivation will be explained in detail. The convenience is the most and basic advantage of the distance learning. . In large area, adult searches convenient, individual, educational opportunities. The distance education advantage meets the needs of adult. For adult students in any field, study any time and anywhere is the most convenient for them. The distance learning and adult learning combination is an excellent cooperation.

Enhance Technology to Realize the International Education-A Case Study on WebCT and Teleconference Enhanced Distance Education in Two Countries

Jing Zhang, New Mexico State University, USA

Globalization is a driving force in the modern world. The context for this case study is the global goals and values of the United States and the Peoples' Republic of China. The United States supports globalization efforts that support its continuing economic development. The United States seeks to implement democratic values and encourage respect of multiple cultures. If successful, the United States will maintain its power and leadership in an evolving world. The Peoples' Republic of China is using globalization as a tool to enhance its economic, political and cultural development as a nation state. If successful, China will be recognized as a leading power in the world community in the 21st century. (Burton, Fairbank) Education is recognized as a leading agent of globalization. Higher education has been creating more and more learning opportunities where students can acquire economic, political and cultural knowledge and a comparative awareness of values.

An Approach to Compare Online Survey Generating Tools

Jingshun Zhang, Naxin Zhao, OISE/ University of Toronto, Canada

Traditional survey models have also improved significantly with the development of computers and the Internet. Online or Web-based surveys utilize modern computer and Internet technologies; and thus bring about many challenges and opportunities. Online surveys are not only a powerful method of data collection for researchers, but are also a very effective approach to online assessment. Although research exists that compare online surveys and traditional surveys, there is a lack of research on the design of online surveys. This paper discusses the comparison of Online Survey Generating Tools (OSGTs). We have set up an effective approach to compare the various OSGTs that combines the theories of survey and the technology of computers and Internet. We undertook this project in three steps: First, we clarified the different concepts, forms, and models of OSGTs to focus our study; second, based on the literature review and our previous study of OSGTs, this paper will discuss the criteria for its comparison; finally, some suggestions for the development of OSGTs are presented.

Where Are We Now? A Study on Online Assessment

Jingshun Zhang, Peter Pericles Trifonas, OISE/ University of Toronto, Canada

Online assessment (OA) has developed quickly with the improvement in computer technology and education. OA is not to simply a combination of assessment with the Internet. Its development brings many challenges and opportunities in educational assessment. There are some advantages such as cost effectiveness, time efficiency, unlimited geographic distance, etc. Although it has many advantages, there are limitations. After we review the relevant research, we found that there aren't enough studies for how to improve this useful tool. In this paper, we shall review OA's concepts, types, functions, advantages and disadvantages. I summarized the related research in repeatability, reliability, equitability, timeliness, and flexibility. Next, I discuss the design process of OA and some key points to improvement of OA. Finally, some key issues for future research will be summarized. I also introduce some my interesting topics of OA.

Foundations of Distance Education Taught Online: Strategies for Successful Online Learning

Ke Zhang, Wayne State University, USA

This session will showcase a successful experience of teaching and learning the foundations of distance education in a completely online graduate course. Learning activities, multimedia course materials, learner testimonials, examples and demonstrations will be shared with attendants to illustrate how to achieve lively, engaging learning via online distance education. Various instructional strategies and learning technologies to stimulate higher order thinking and active learning will be highlighted and discussed. The discussions will also address topics like how to address learning characteristics in a virtual environment, how may instructors use some of the freely available technologies to facilitate online teaching and learning, and more.

Moderating Online Collaborative Learning for Critical Thinking, Problem Solving and Satisfaction: Strategies and Effects

Ke Zhang, Wayne State University, USA

This session will share an ongoing study on the strategies and effects of various moderation strategies on graduate students' learning and performances, including: a) critical thinking, b) problem solving, c) the collaborative processes, and d) perceived satisfaction in online learning. Findings will be shared and discussed in details at the conference upon acceptance of this proposal.

Integrating Library Resources Into the Online Teaching

Xiwen Zhang, California State University, San Bernardino, USA

This presentation demonstrates the success of the integrating information literacy into a 3-country (US, China and Argentina) e-learning course on the Blackboard, a pilot project of the Crossing Academic Borders called "Vines and

Wines". With the experience from the project, the presenter at California State University, San Bernardino has successfully developed library resources for different disciplines and integrated the library resources into the Blackboard courses. The presentation describes the successful practices related to the integration: faculty workshop trainings; outreach to faculty members and providing individual help; presentations to college deans' meetings and department chairs' meetings; getting the approval of the Academic Affairs Council and working together with the technical divisions in charge of the campus Blackboard. The presentation also examines the related issues and the difficulties concerning the design of library resources for different disciplines.

Design of Diagnostic Cognitive Assessment for Web-Based Learning Environments with Bayesian Network Models

Zhidong Zhang, Kit Leung, McGill University, Canada

With the development of web-based learning (WBL) tools, courses and programs, interactive environments are increasingly prevalent in and even dominating higher education. This type of delivery poses a challenge to traditional assessment. Knowledge acquisition and skill development in a WBL environment demand alternative assessment strategies and techniques to provide information in cognitive explanations about mastery of knowledge and skill. This study explores diagnostic cognitive assessment using Bayesian networks (BN) and an evidence-centered design. Simulated data have been used to examine the functions of these models which can be used to infer students' mastery of domain knowledge and problem-solving skills, such that evidence variables developed are linked to performance components of cognitive tasks. Findings indicate that BNs enable assessment within WBL to: (1) provide valid and interpretable diagnostic feedback on performance, and (2) track progress in mastering complex domains of cognitive knowledge and problem-solving competency.

Teaching Qualitative Research Online: Strategies, Issues, and Resources

Cordelia Zinskie, Judi Repman, Georgia Southern University, USA

Enrollment in online courses continues to grow, and online education is critical to the long-term strategic planning of many higher education institutions. This growth in online coursework has necessitated developing web-based versions of courses that perhaps, at first glance, might not be viewed as ones transferred easily to the online setting. This brief paper describes our experiences with developing and implementing an online qualitative research course.

Podcasting - Learners' Friend or Foe?

Susan Zucker, National Clearinghouse for Science, Technology and the Law at Stetson University College of Law, USA; Stephanie Gaskins, University of South Florida College of Public Health, USA

Learning at any time and in any place has been bolstered by podcasting. In fact, podcasting has become the rage because of the advent of Ipods and ITunes. Now, academic content is available for download just like music; the biggest vendor is none other than, ITunesU. Attendees may be surprised to learn about the different educational venues in which podcasting is being used. How to create a podcast will be shared. Who is using podcasts and why they are being used will be discussed. Of particular interest, the relationship between training and/or learning and podcasting is explored. Some have described podcasting as telling or talking. Some dispute that telling/talking constitutes training and/or learning. Does the curricular and instructional design employed influence the effectiveness of a podcast? Attendees will interact with each other in this session. The presenter will share practical knowledge and elicit best practices from the audience.

More Efficient Learning on Web Courseware Systems?

Janko Zufic, University of Juraj Dobrila in Pula and Faculty of Electrical Engineering and Computing, University of Zagreb, Croatia; Damir Kalpic, Faculty of Electrical Engineering and Computing, University of Zagreb, Croatia

The article describes a research conducted on students at the University in Pula, by which was attempted to establish whether there is a relationship between exam success and a type of online teaching material. Students were subjected to psychological testing that measured factors of intelligence: verbal, non-verbal and math-logical. Four different teaching resources were prepared for the same educational material. First of those was adjusted for students with the strongest verbal abilities, second for students with the strongest math-logical abilities, third for the students with the strongest non-verbal factor of intelligence. Fourth teaching material was prepared for a mixed group of students. Students accessed the online educational material using courseware tool Moodle. Tests were much better solved by students who had adjusted teaching materials than by students in the mixed group or those in the control group. This article describes the intelligence tests that were used in the study, structure of the teaching materials and results.

A 21st Century Perspective: Using a Client-Centered/Responsive Approach to Evaluating the Effectiveness of Large-Scale Online Teacher Professional Development

Vicky Zygouris-Coe, Bonnie Swan, Catherine Glass, University of Central Florida, USA

As we move into the 21st century, keeping teachers abreast of the current and rapidly changing knowledge-based society is why new legislation and other nation- and state-wide initiatives lay emphasis on the importance of providing teachers with "high-quality," sustained, and intensive professional development. As states are making efforts to meet the need of keeping teachers' knowledge current in new and expanding ways, there is an increasing need to research and effectively evaluate these methods in ways that can contribute to their success and improvement. This need for more evidence of effectiveness is especially great in the field of online professional development where little is currently known about best practices for design and implementation (Whitehouse, Briet, McCloskey, Ketelhut, & DeDe, 2006). This paper describes one such effort, which uses a client centered/responsive approach to evaluate a high-stakes, large-scale online professional development project.

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